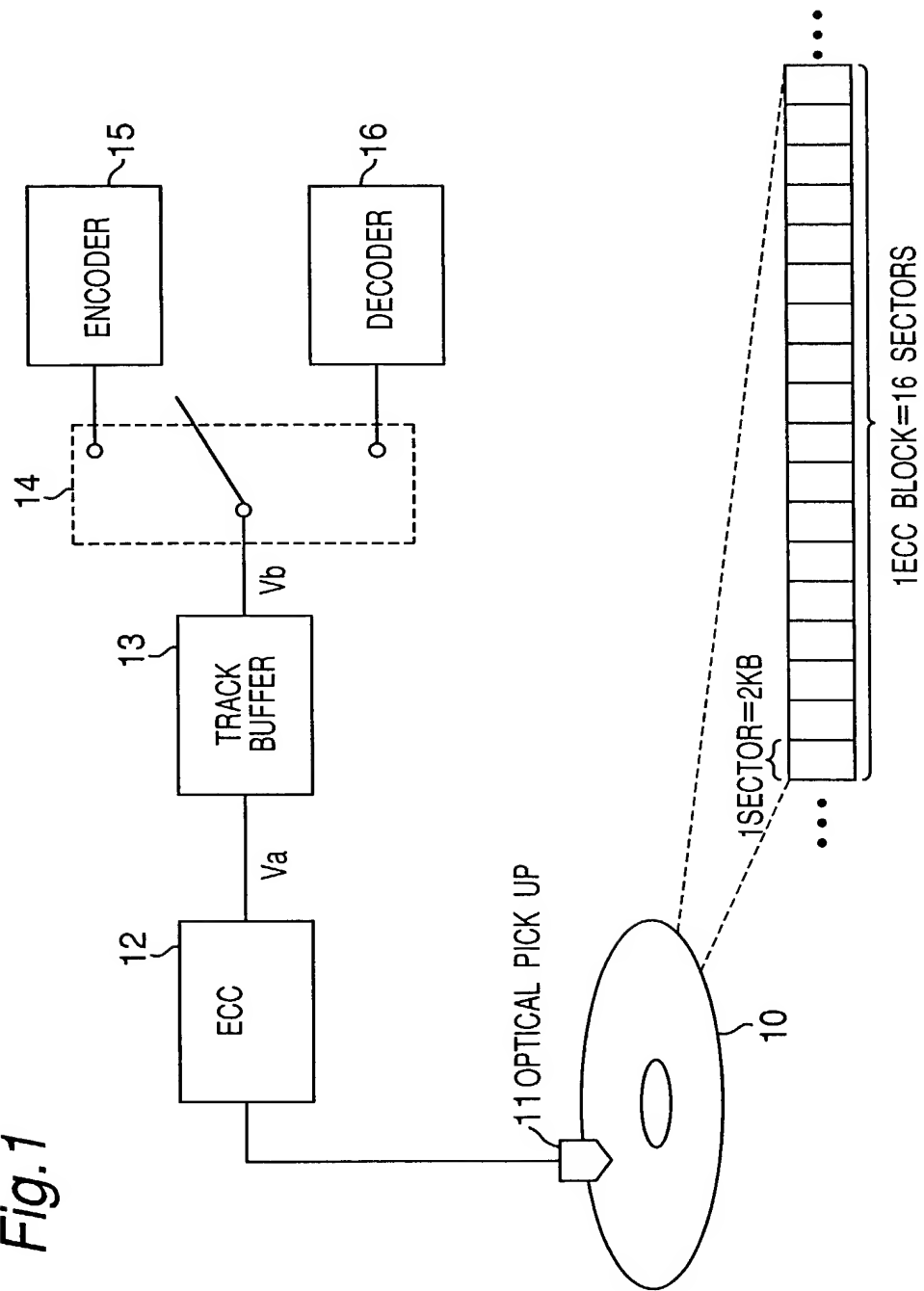


Fig. 1



ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED

Fig.2A

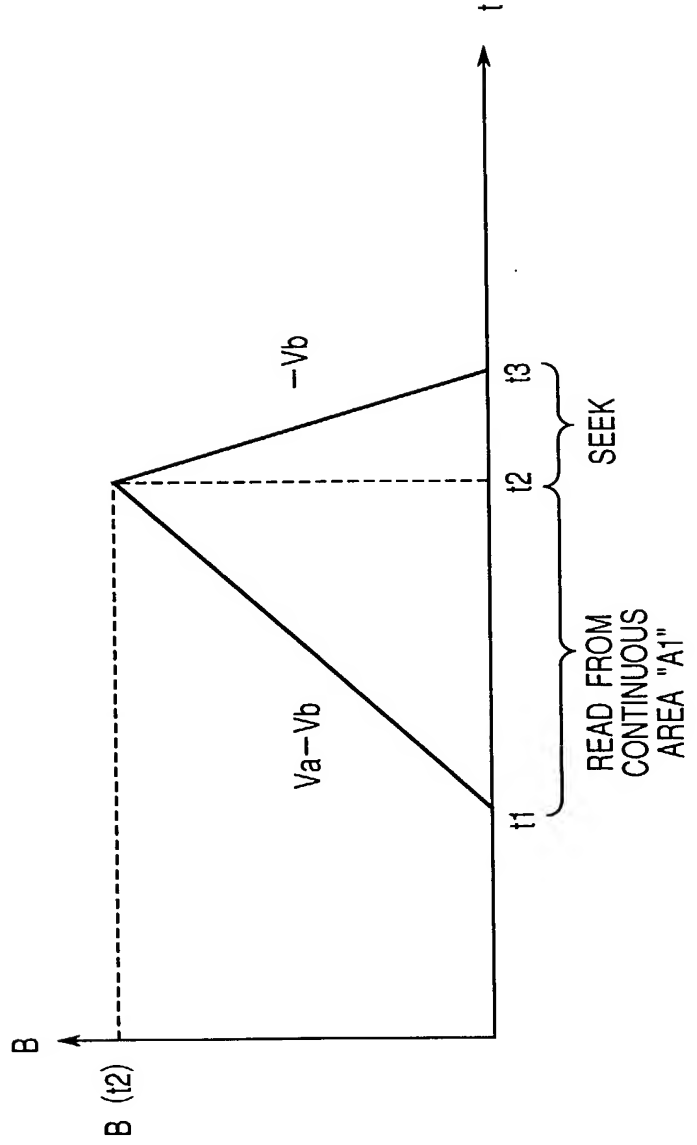
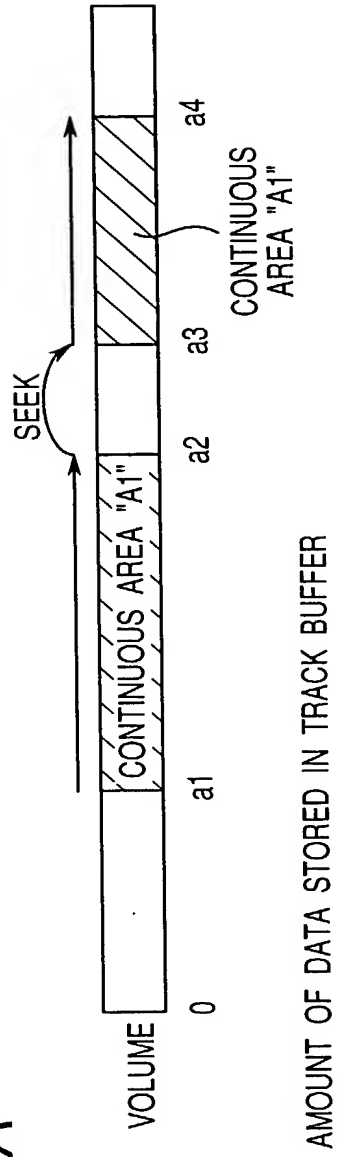
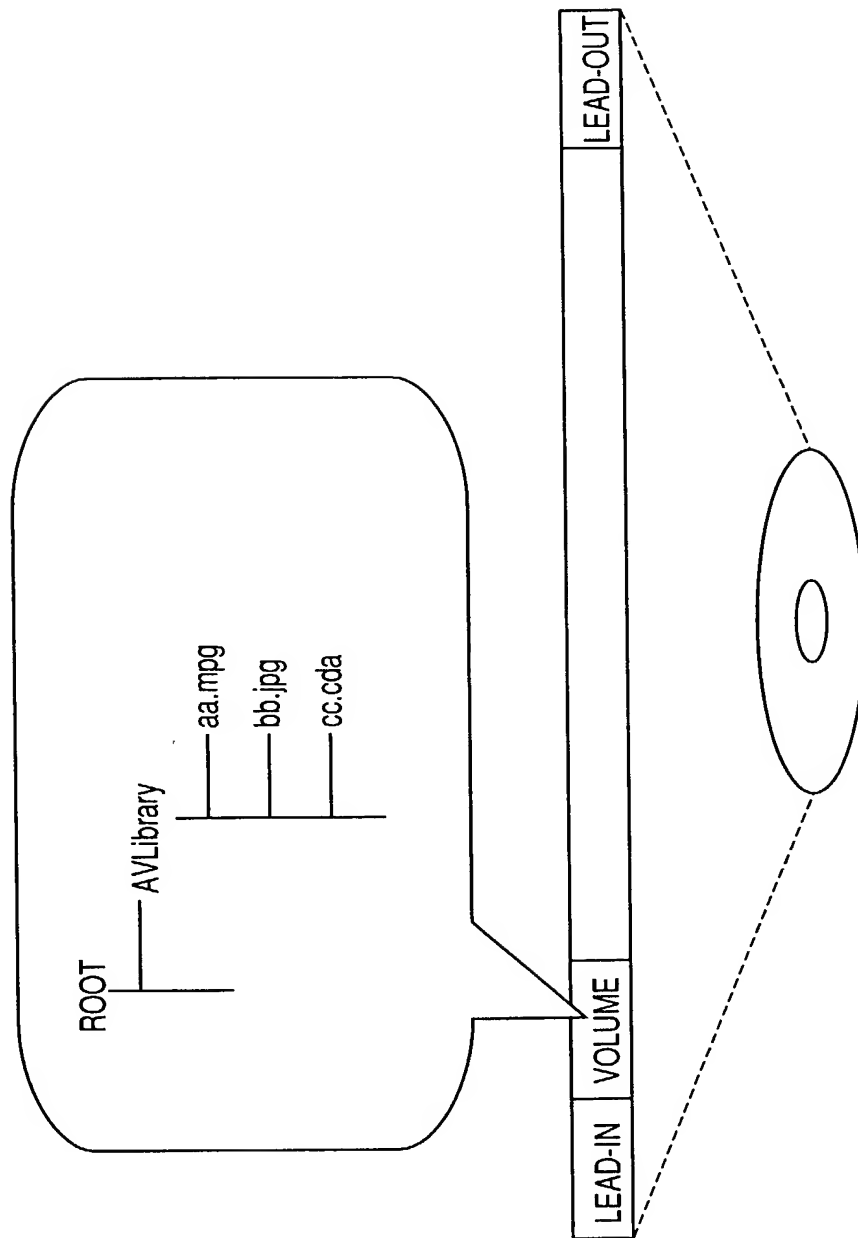


Fig.2B

Fig.3



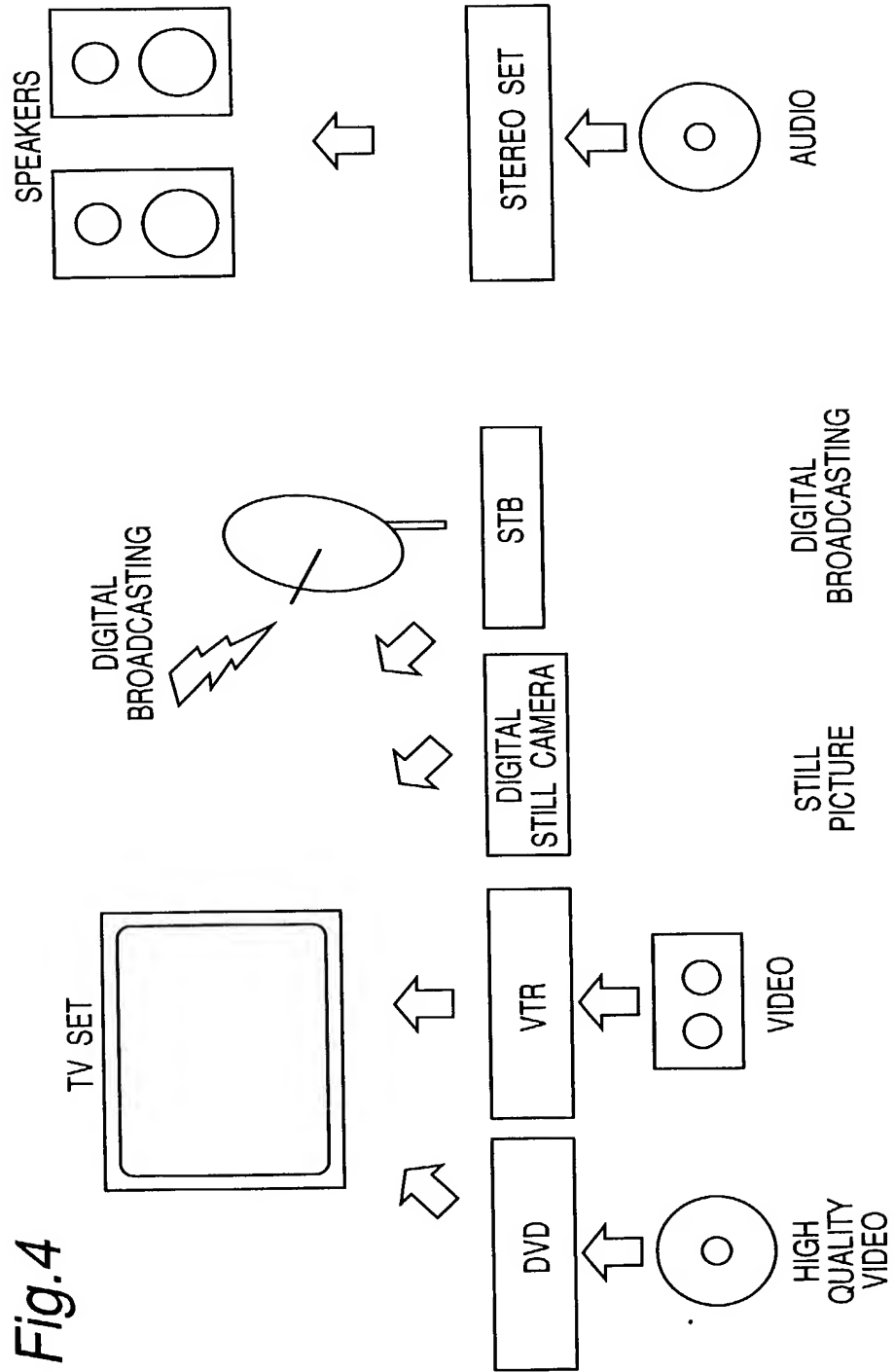


Fig. 5

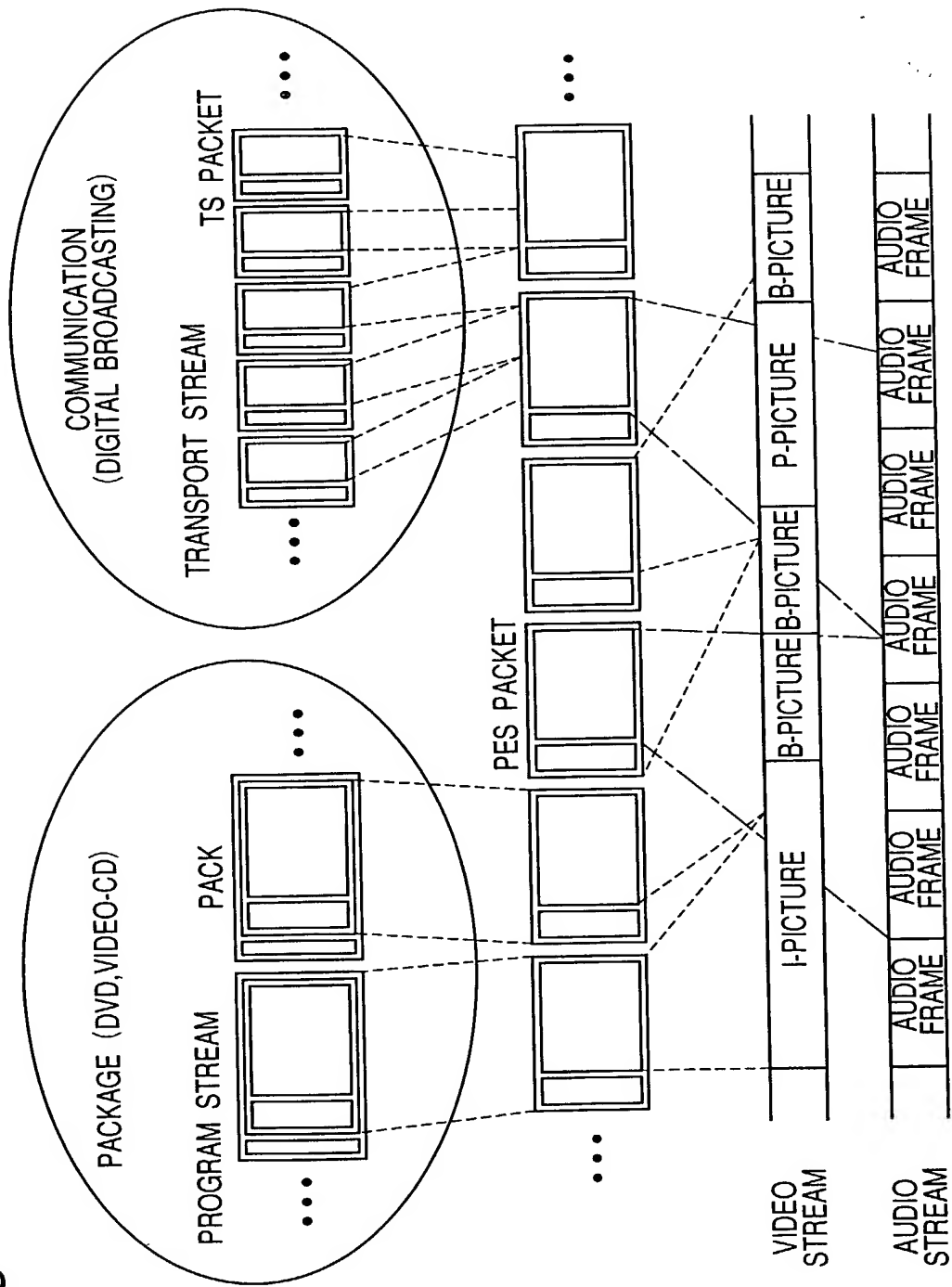


Fig.6

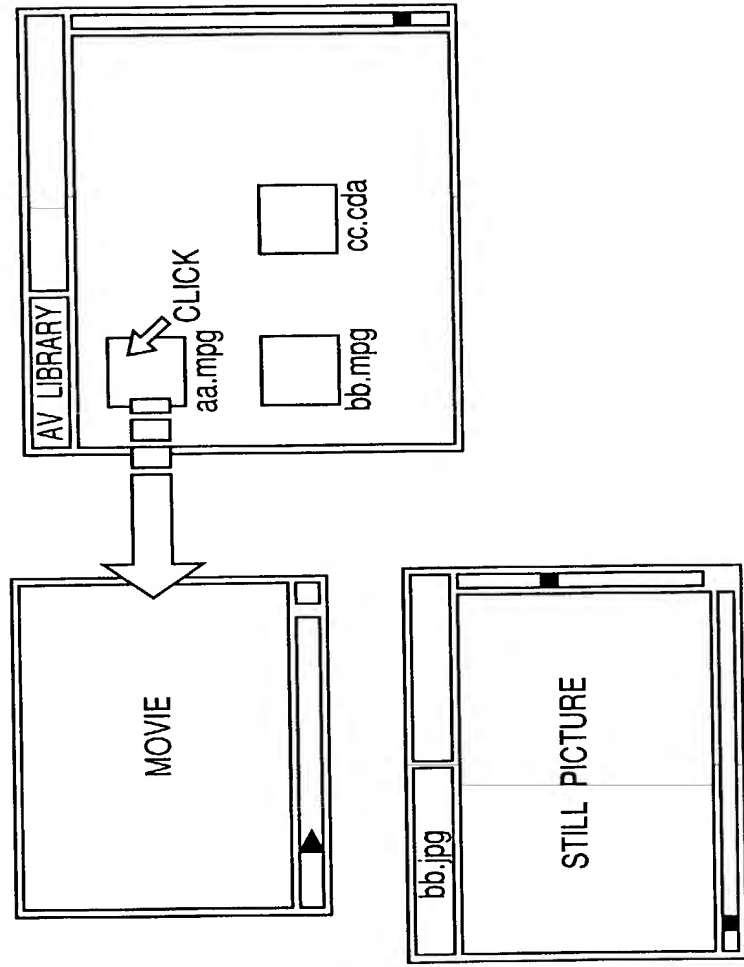


Fig. 7

The diagram illustrates a digital video recording system. At the top, two input sources are shown: 'ANALOG BROADCASTING' (represented by a lightning bolt and a multi-antenna tower) and 'DIGITAL BROADCASTING' (represented by a lightning bolt and a single-antenna tower). Arrows from these sources point to a 'TV SET' block, which includes a central screen and two side speakers. Below the TV set, a 'DVD RECORDER' block is shown. An arrow labeled 'VTR' points from the TV set to the DVD recorder. The DVD recorder is connected to a central disc icon. From the disc, three arrows point to output blocks: 'STEREO SET' (with 'AUDIO' written below it), 'HIGH QUALITY VIDEO (DVD Video)', and 'DIGITAL STILL CAMERA' (with 'STILL PICTURE' written below it).

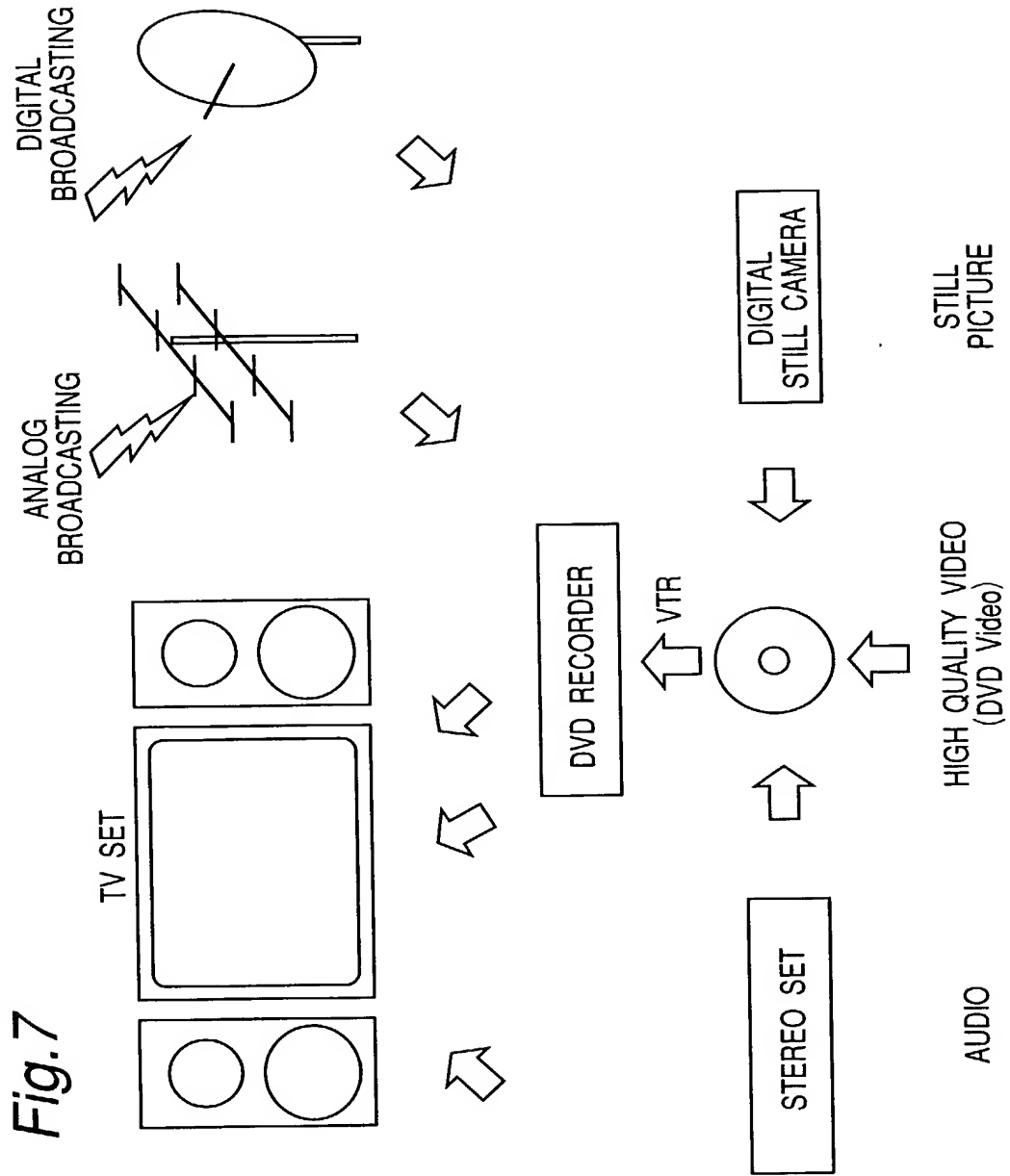


Fig.8

<u>PROGRAM</u>	<u>RECORDING DATE & TIME</u>
1) The Foreign Movie Theater	99.9.20 pm9 : 00-
2) Morning Drama Series	99.9.22 am8 : 30-
3) World Cup Finals	99.6.10 am2 : 00-
4) Beethoven	96.4.1

Fig.9A

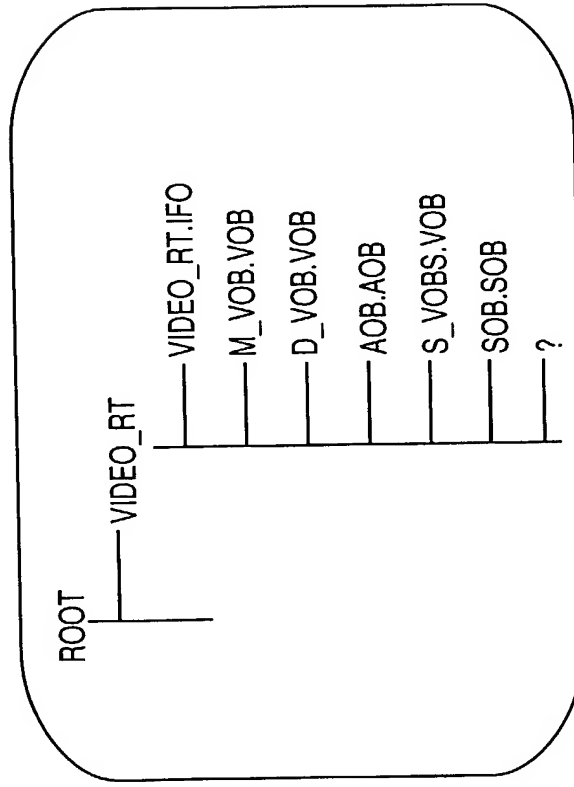


Fig.9B

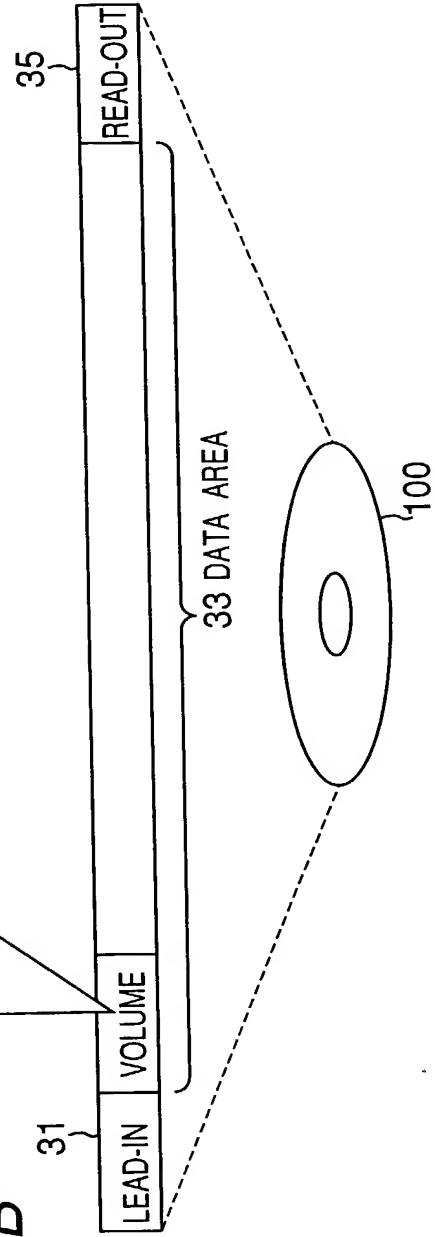
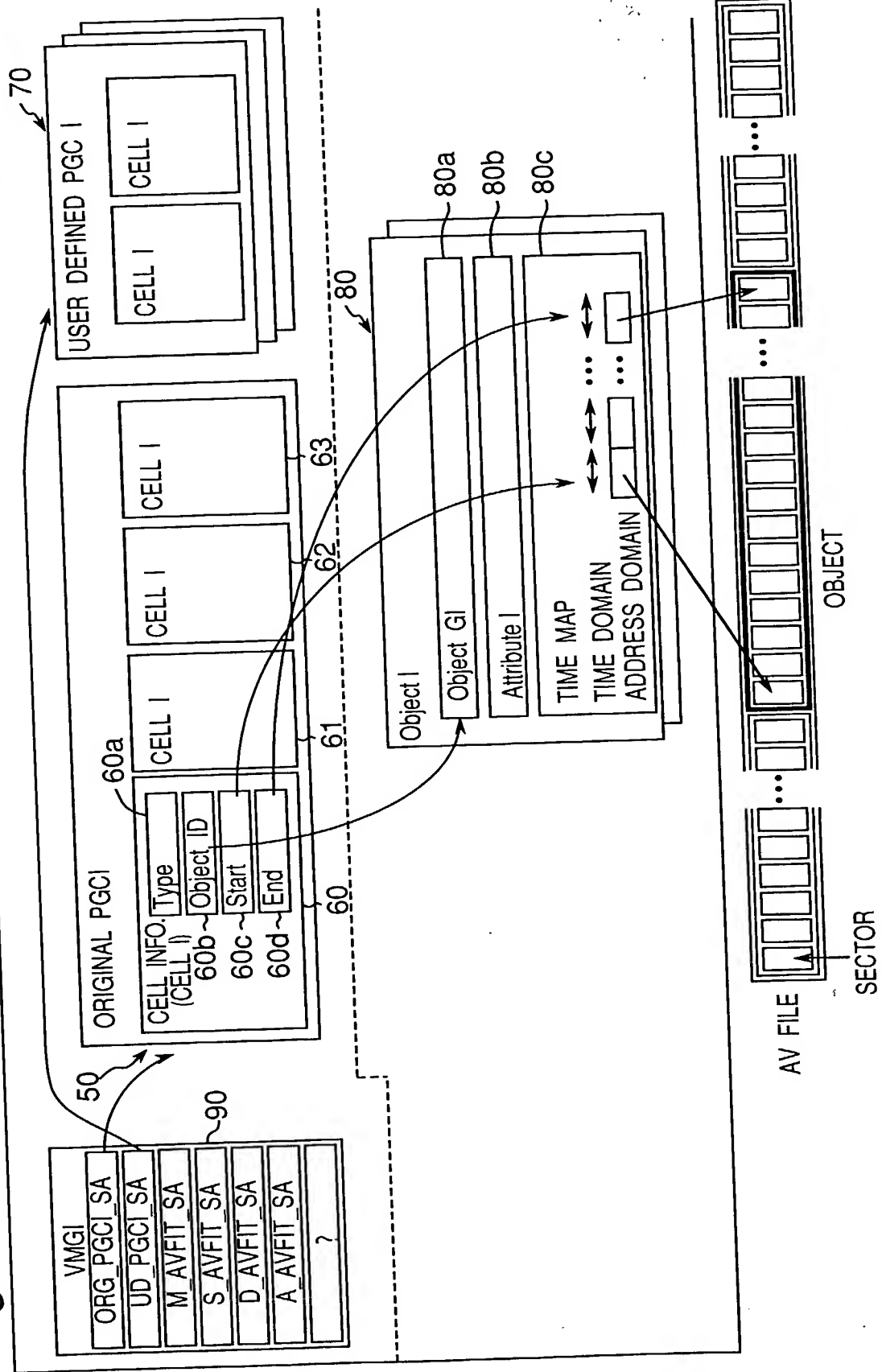


Fig.10

VIDEO_RT.IFO FILE



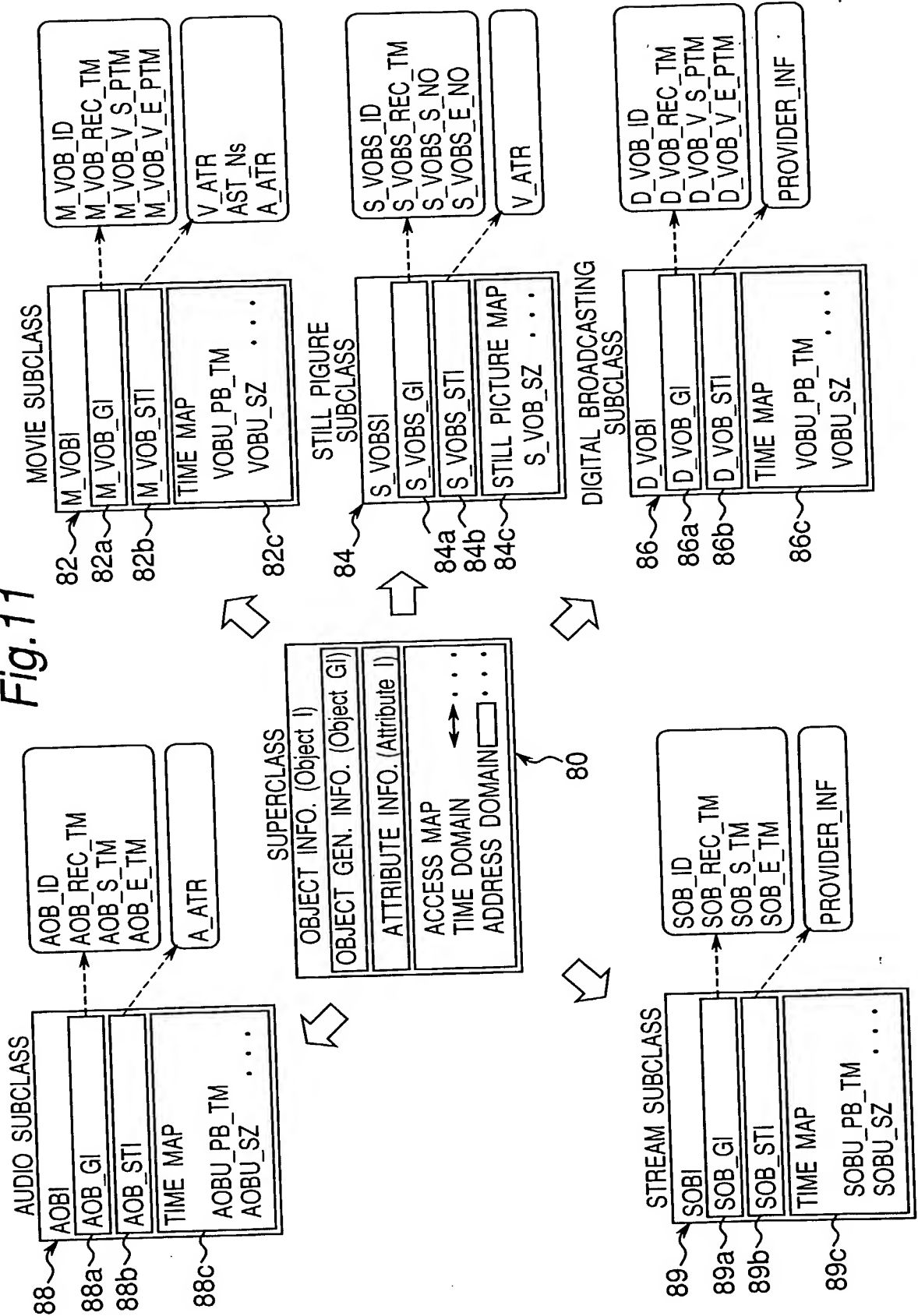
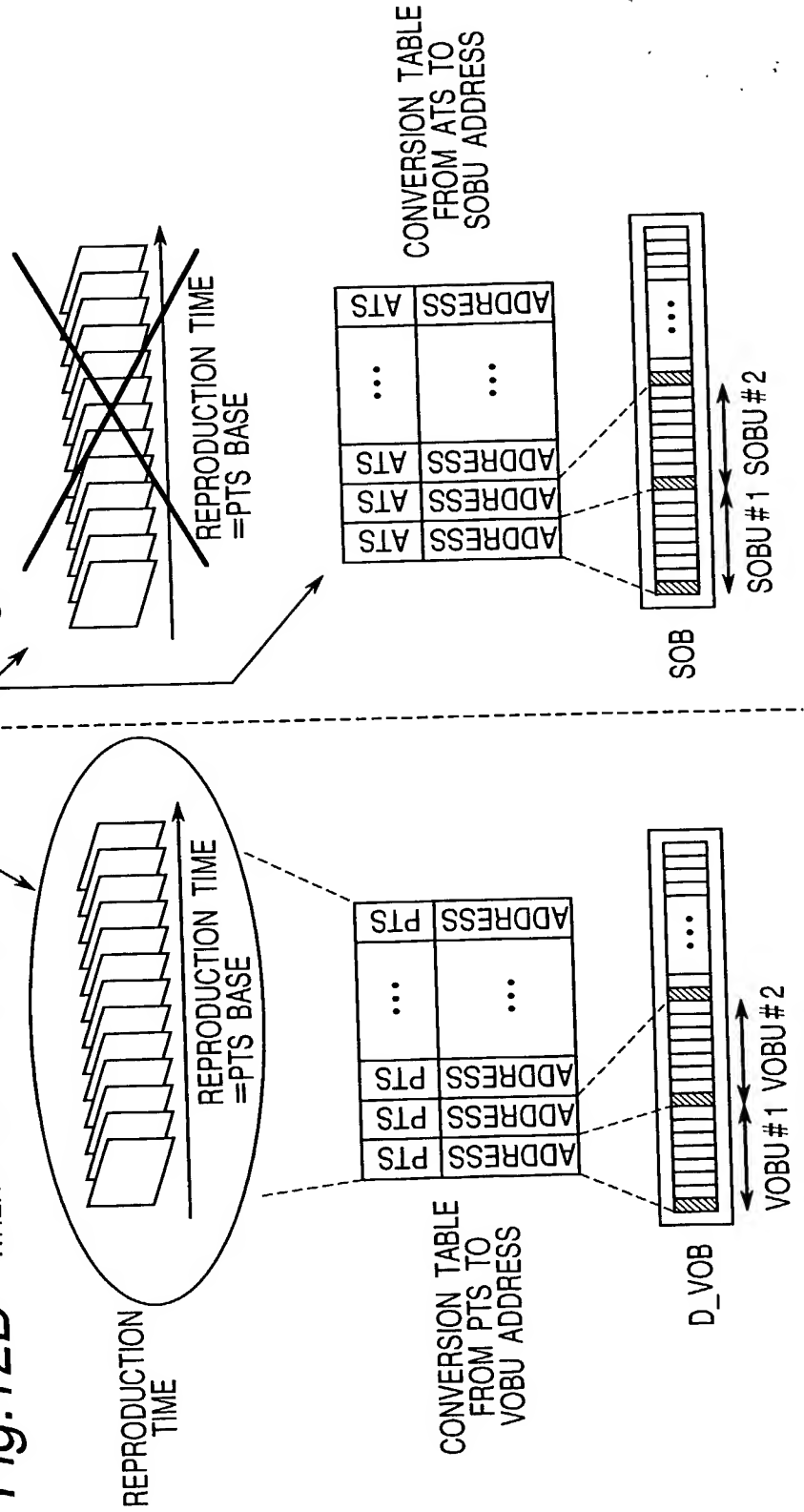
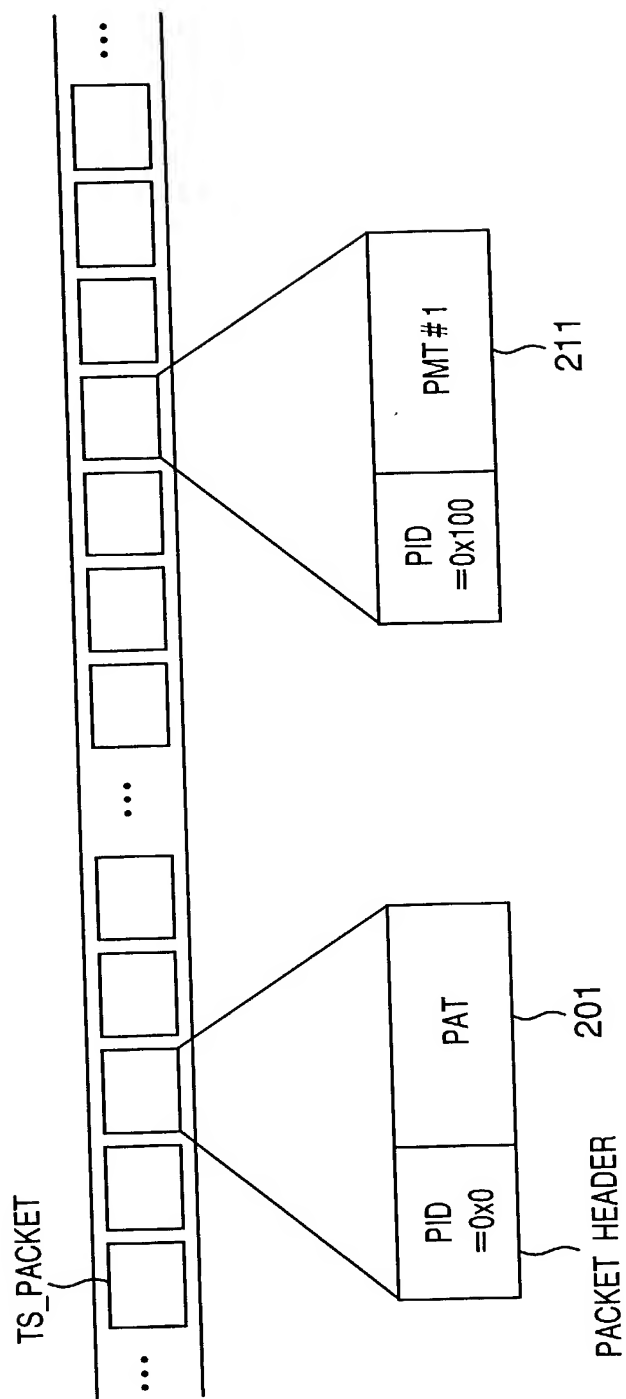


Fig. 12C WHEN PTS IS NOT DETECTABLE

Fig. 12B WHEN PTS IS DETECTABLE





ProgramID	PMT_PID
#1	0x100
⋮	⋮

201 PAT

ES_PID	Stream_type
0x101	ISO / IEC11172 - 2 Video
0x102	ISO / IEC11172 - 3 Audio
:	:

211 PMT

Fig. 14

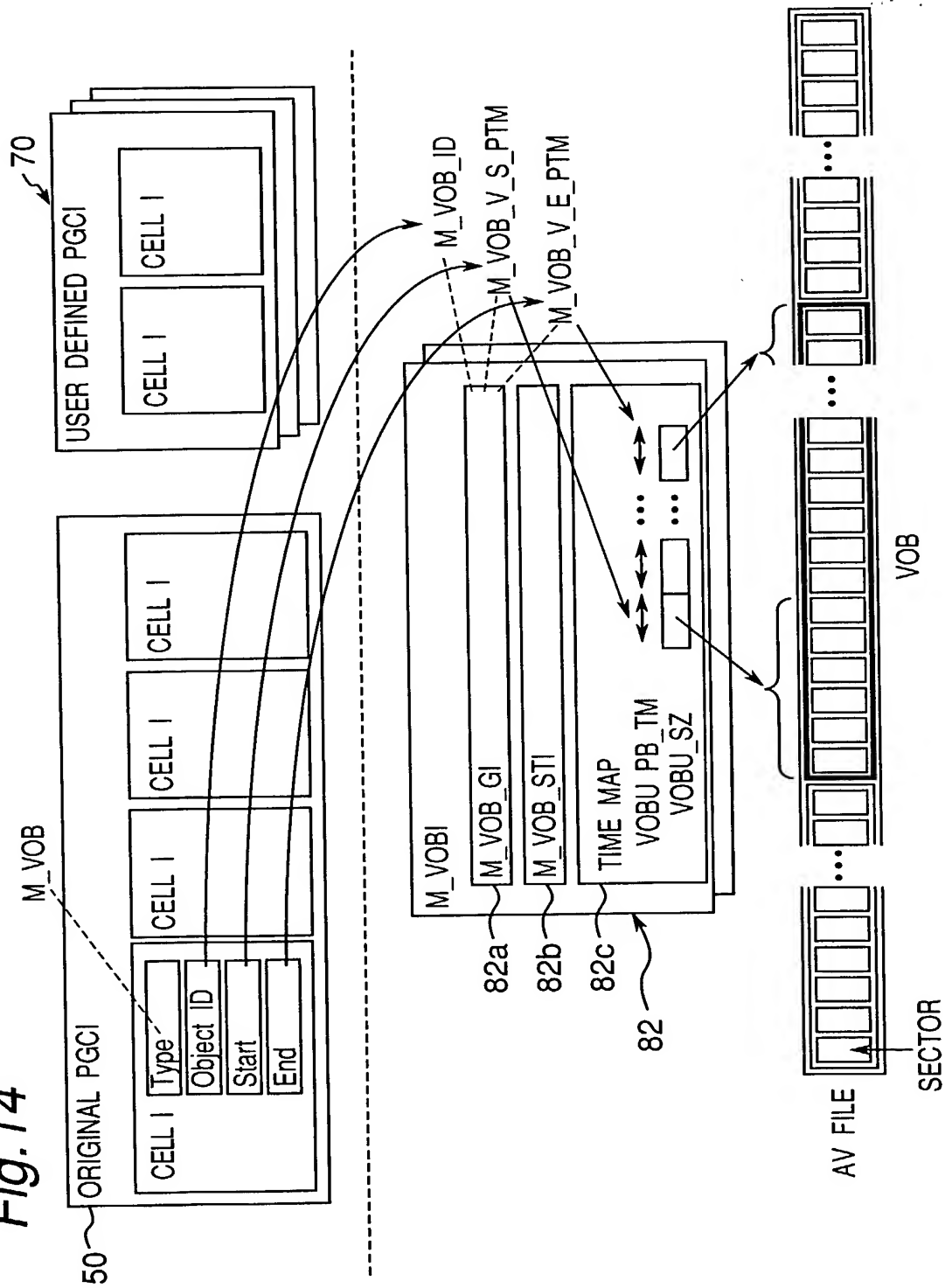


Fig. 15A

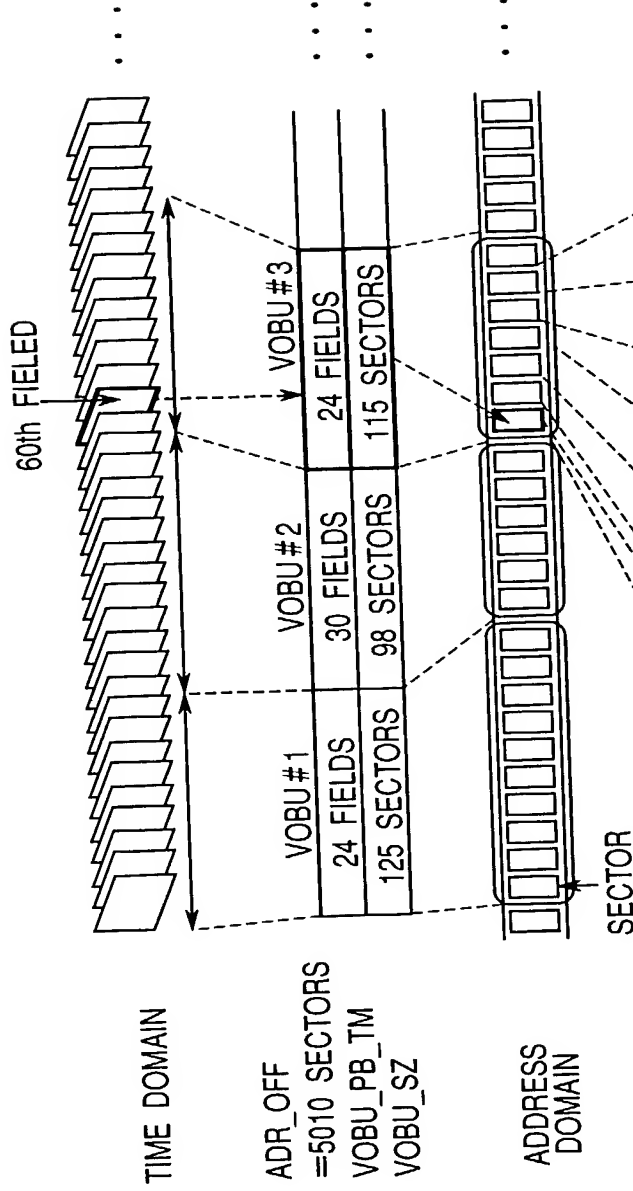


Fig. 15B

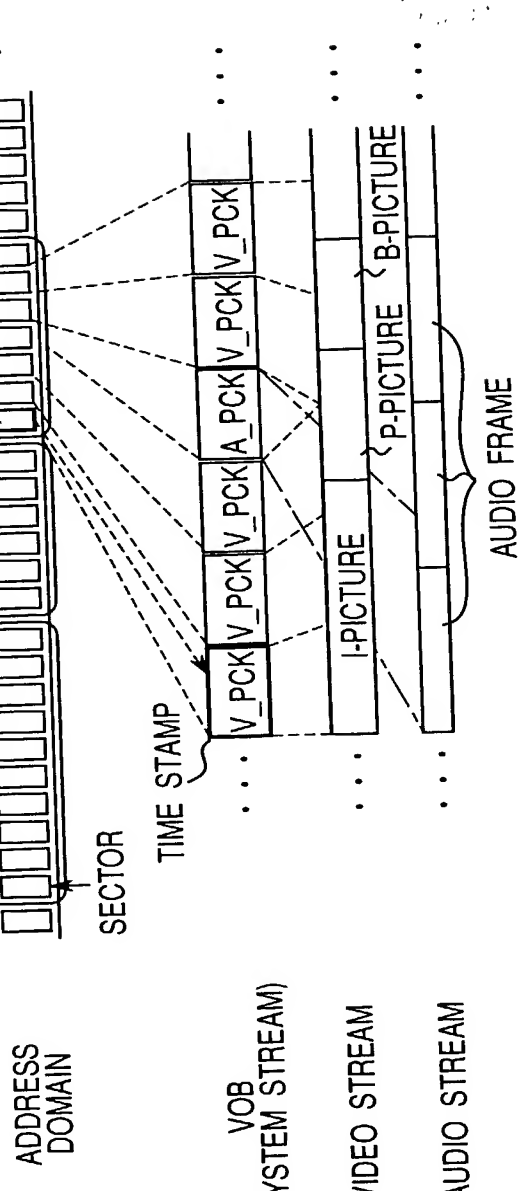


Fig. 15D

Fig. 15E

Fig. 15F

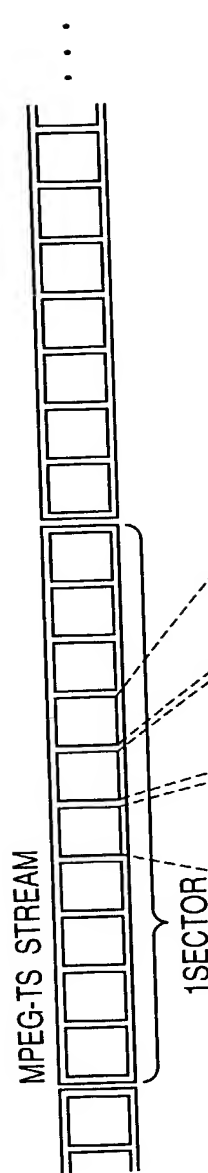


Fig. 16A

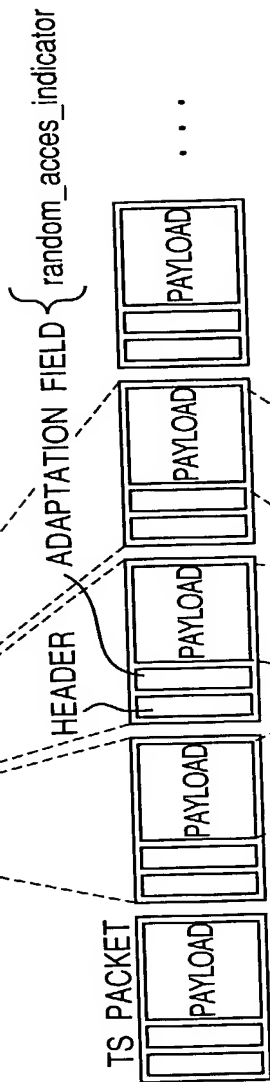


Fig. 16B

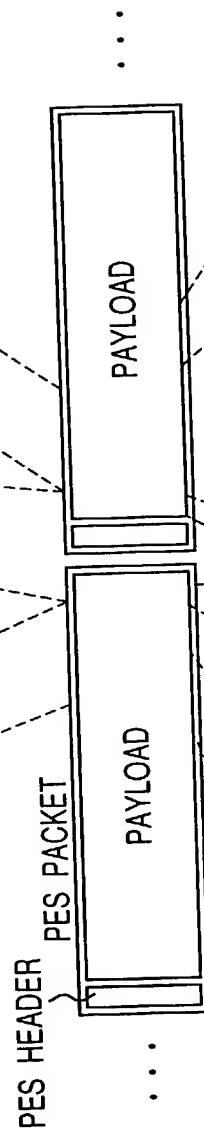


Fig. 16C

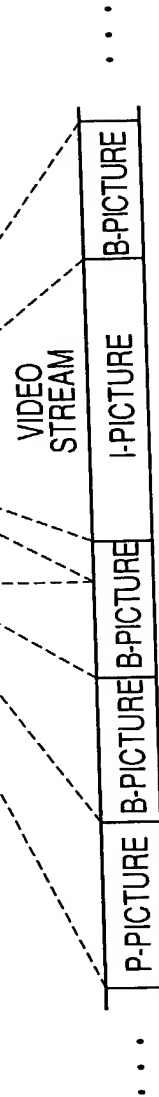


Fig. 16D

Fig. 17 is a diagram illustrating the relationship between original and user-defined PGCI, audio object info, and AV file sectors. The diagram is divided into three main sections by a dashed line.

Top Section (ORIGINAL PGCI): A large rectangle labeled "ORIGINAL PGCI" contains a "CELL I" box. Inside "CELL I" are four smaller boxes: "Type", "Object ID", "Start", and "End".

Middle Section (USER DEFINED PGCI): A stack of rectangles labeled "USER DEFINED PGCI" (indicated by a squiggly arrow labeled 70) contains "CELL I" boxes. Arrows connect the "Object ID", "Start", and "End" boxes from the "ORIGINAL PGCI" to the "CELL I" boxes in the "USER DEFINED PGCI".

Bottom Section (AUDIO OBJECT INFO. (AOBI)): A large rectangle labeled "AUDIO OBJECT INFO. (AOBI)" contains several fields:

- AOB_GI**: A box with a dashed line pointing to "AOB_ID" in the "USER DEFINED PGCI".
- AOB_STI**: A box with a dashed line pointing to "AOB_A_S_PTM" in the "USER DEFINED PGCI".
- TIME MAP**: A box containing a sequence of arrows pointing to and from a series of small boxes. One of these small boxes has a dashed line pointing to "AOB_A_E_PTM" in the "USER DEFINED PGCI".
- AOBU_PB_TM**: A box with a dashed line pointing to a small box in the "TIME MAP" sequence.
- AOBU_SZ**: A box with a dashed line pointing to a small box in the "TIME MAP" sequence.

Right Section (AV FILE): A series of "SECTOR" boxes are shown, grouped into "AOB" blocks. Arrows from the "TIME MAP" sequence point to specific sectors within these "AOB" blocks. The first "SECTOR" is labeled "AV FILE".

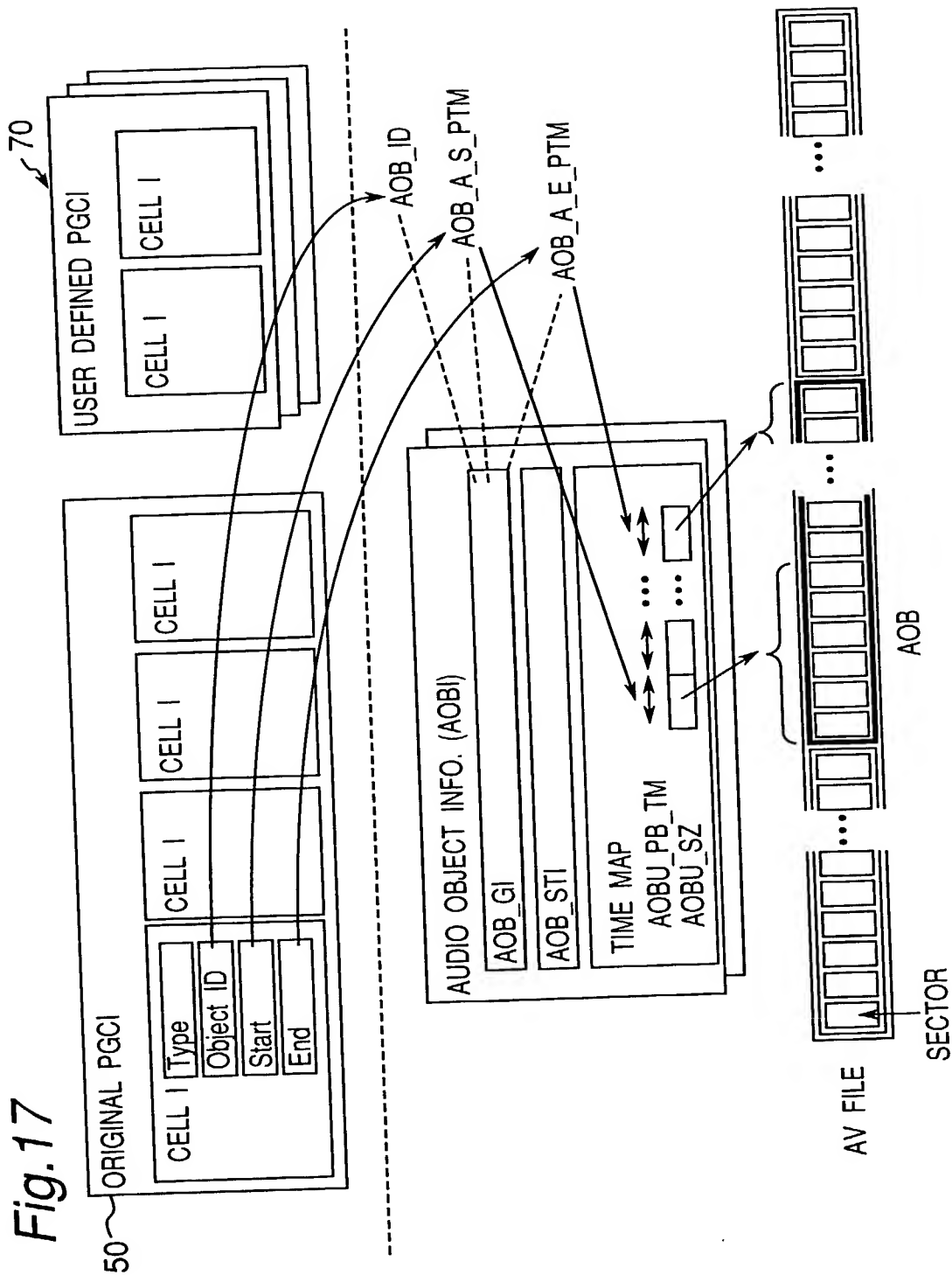


Fig. 18 is a diagram illustrating the relationship between original and user-defined PGCI and still picture object information. The diagram is divided into two main sections by a dashed line.

Top Section (Original PGCI): Labeled "50 ORIGINAL PGCI", it shows a table with four columns, each labeled "CELL I". The first column contains sub-headers: "Type", "Object ID", "Start", and "End".

Bottom Section (User Defined PGCI): Labeled "70 USER DEFINED PGCI", it shows a simplified table with two columns, each labeled "CELL I".

Still Picture Object Info. (S_VOBSI): A central block containing:

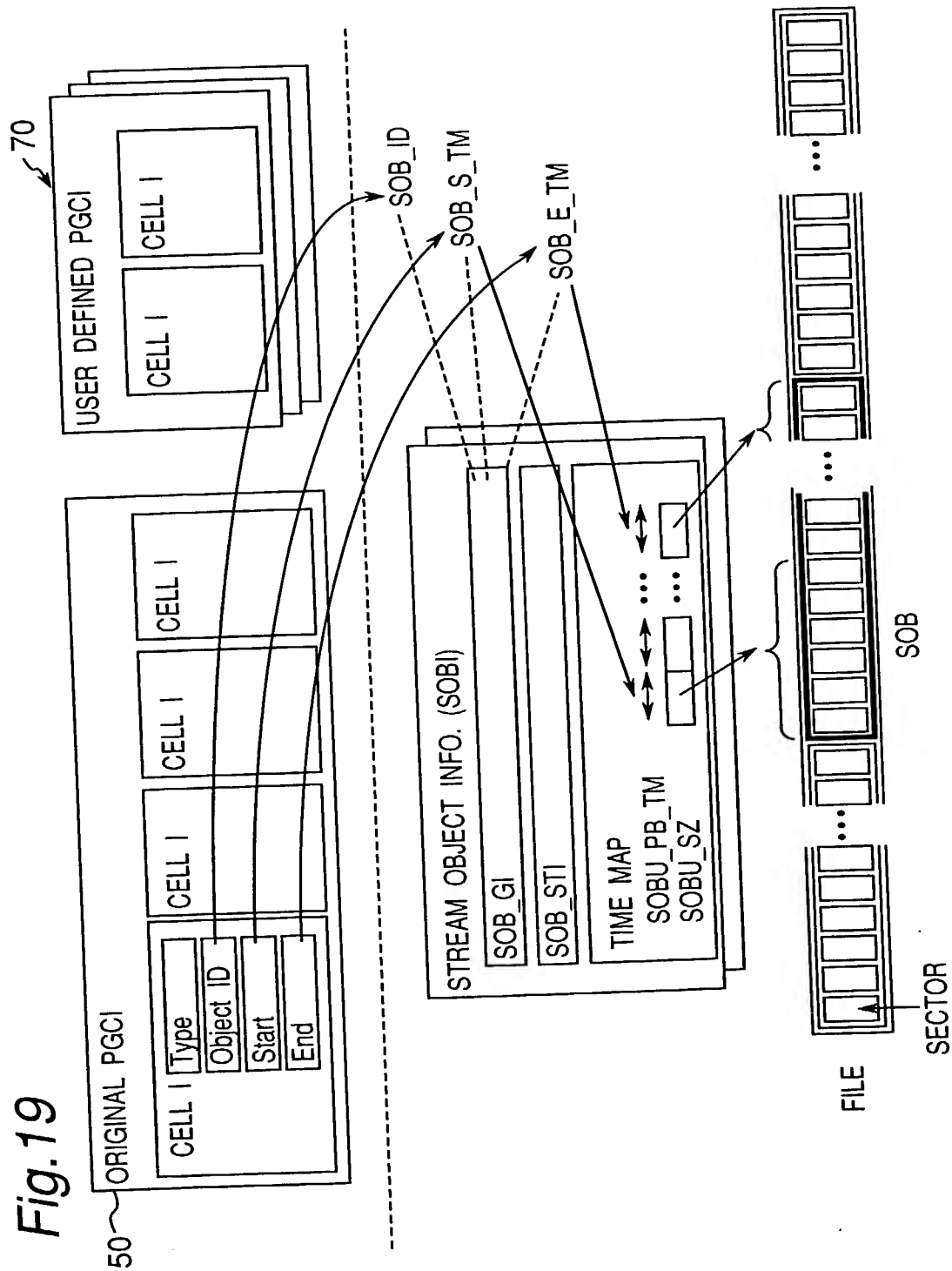
- S_VOB_GI**: A single box.
- S_VOB_STI**: A single box.
- STILL PICTURE MAP**: A row of four boxes.
- S_VOB_SZ**: A row of four boxes.

AV FILE and S_VOBS: At the bottom, an "AV FILE" is represented as a sequence of "SECTOR" blocks. A bracket groups a subset of these sectors, labeled "S_VOBS".

Arrows and Labels:

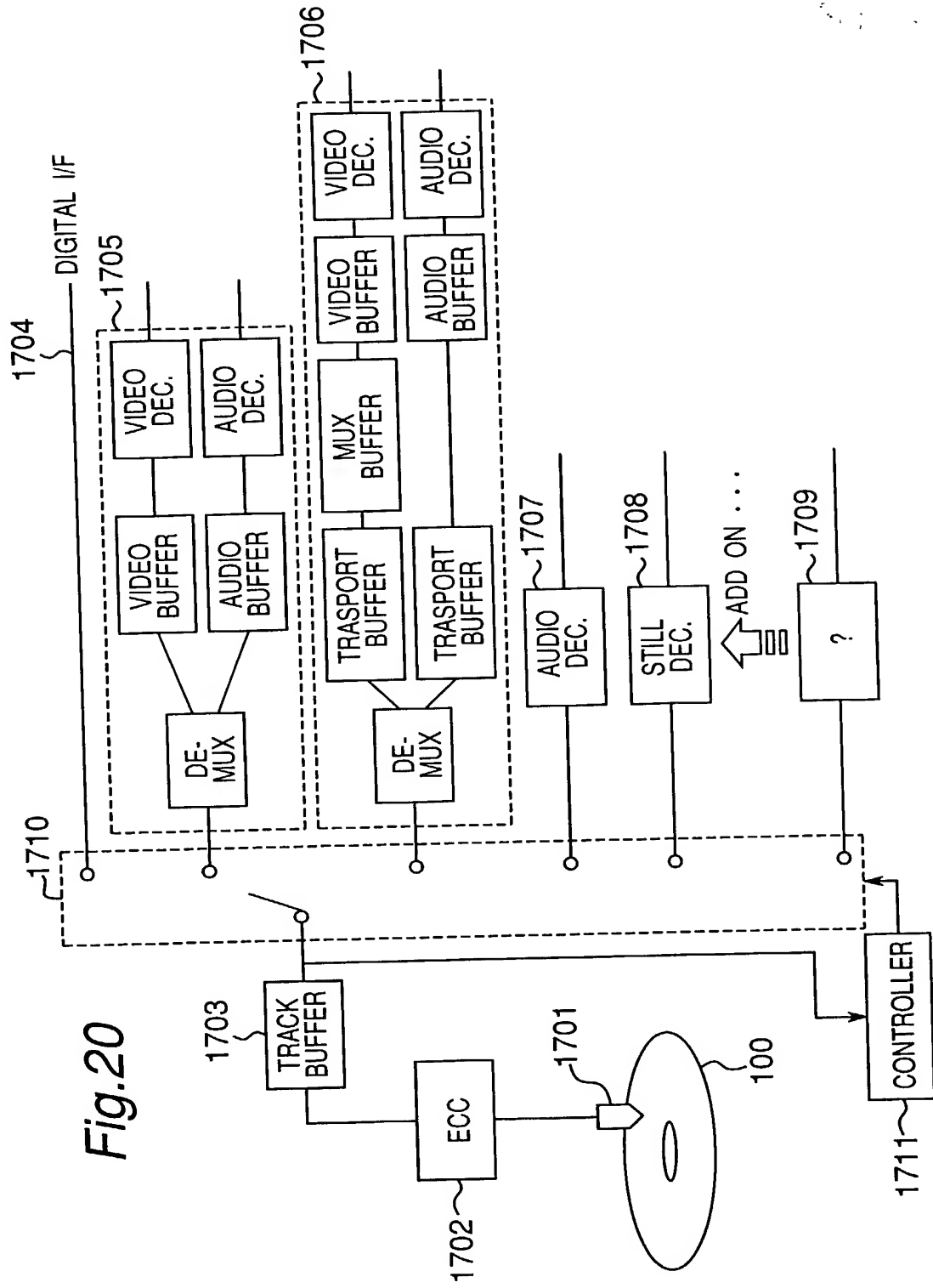
- Arrows point from the "Type", "Object ID", "Start", and "End" fields of the original PGCI to the "STILL PICTURE MAP" and "S_VOB_SZ" fields of the S_VOBSI block.
- Arrows point from the "CELL I" fields of the user-defined PGCI to the "STILL PICTURE MAP" and "S_VOB_SZ" fields of the S_VOBSI block.
- Labels with dashed lines point to specific fields: "S_VOBS_ID" points to the first box of the S_VOB_SZ row; "S_VOBS_S_NO" points to the second box of the S_VOB_SZ row; "S_VOBS_E_NO" points to the third box of the S_VOB_SZ row.

Fig. 19



11 03 03 04 05 06 07 08 09 10 11 12 13 14 15

Fig.20



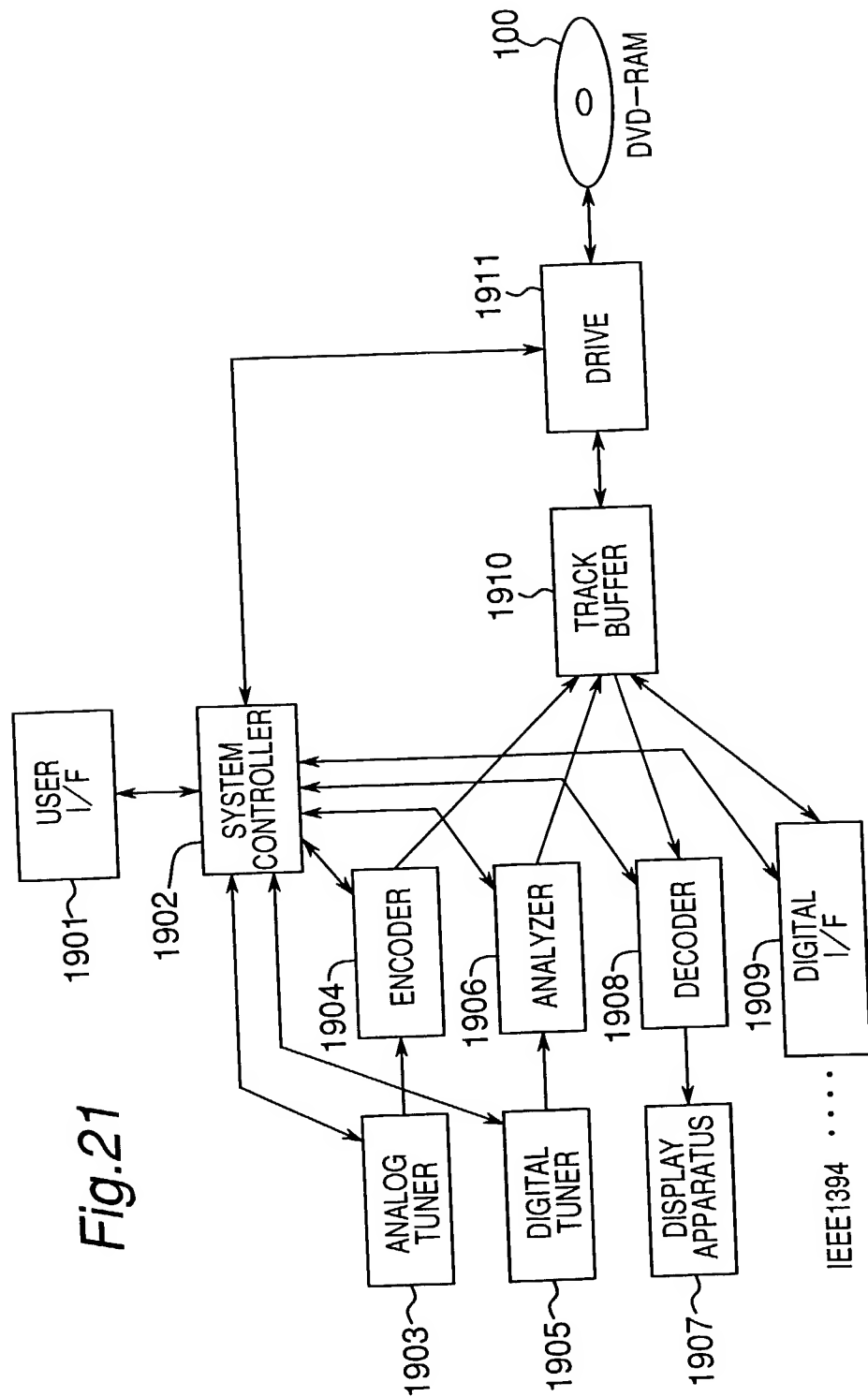


Fig.21

IEEE1394

IEEE1394

Fig. 22

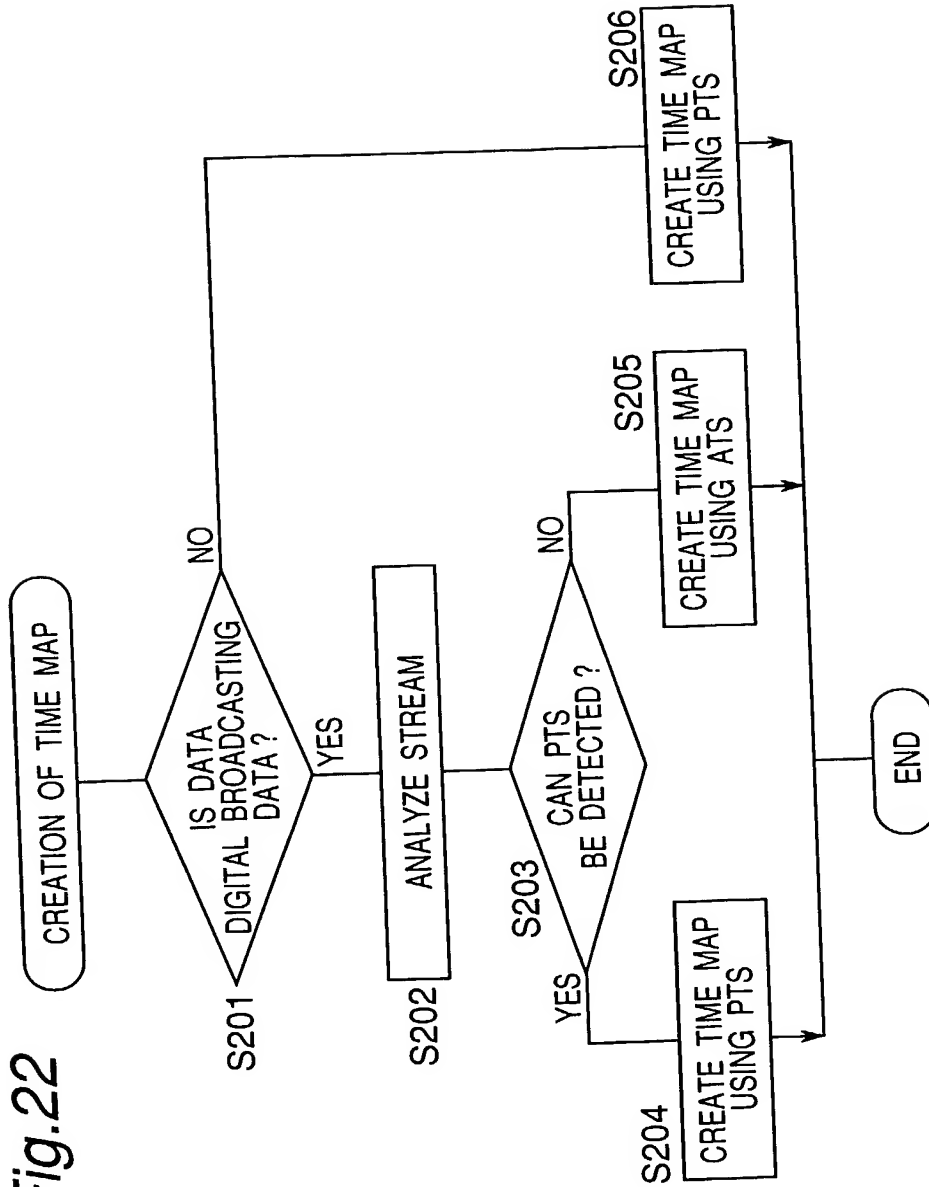


Fig. 23

```
graph TD
    2001[USER I/F] <--> 2002[SYSTEM CONTROLLER]
    2002 --> 2007[DRIVE]
    2002 --> 2006[TRACK BUFFER]
    2002 --> 2004[DECODER]
    2002 --> 2005[DIGITAL I/F]
    2007 <--> 100([DVD-RAM])
    2006 <--> 2007
    2006 <--> 2004
    2006 <--> 2005
    2004 --> 2003[DISPLAY APPARATUS]
    2005 --- IEEE1394[IEEE1394 ...]
```

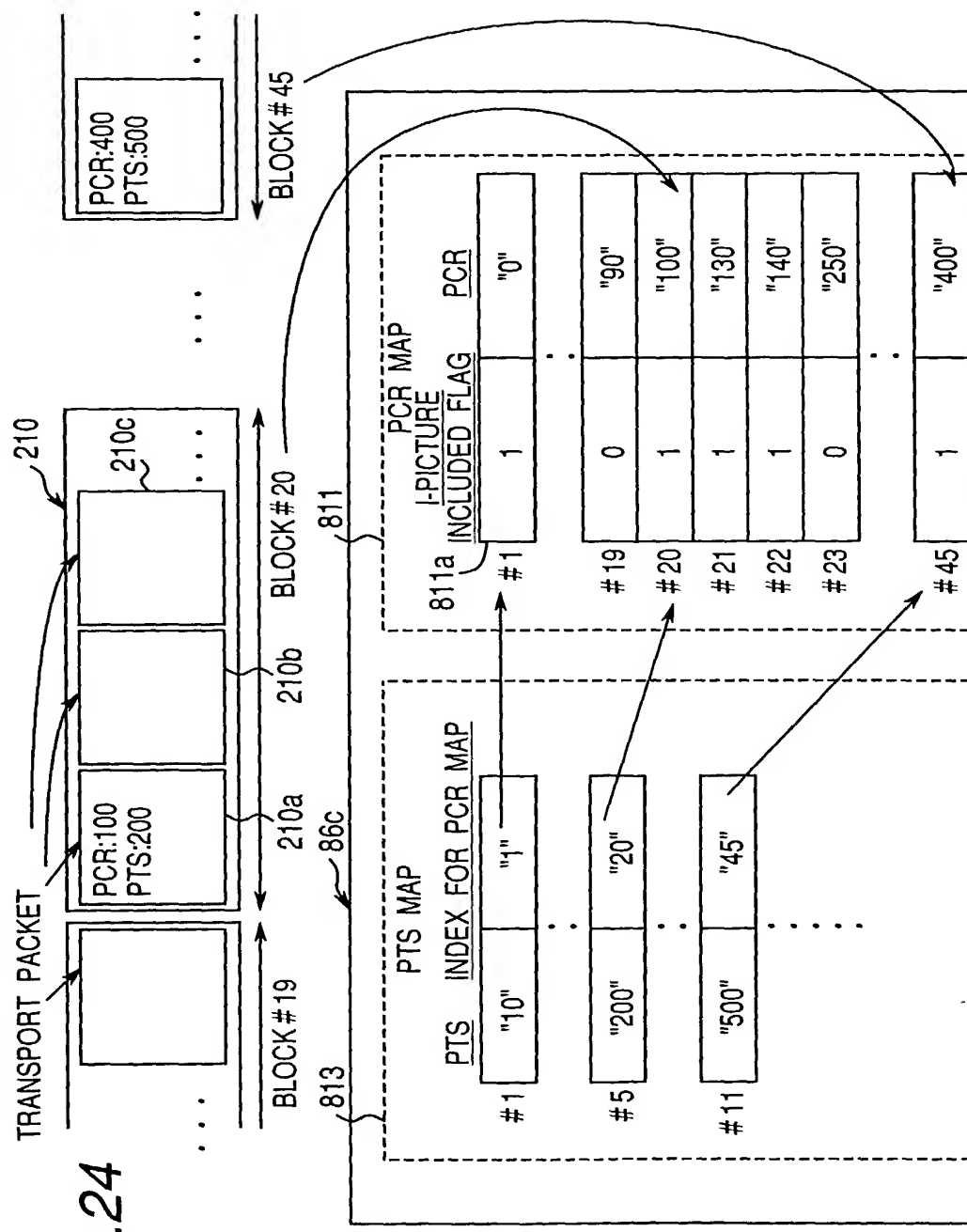
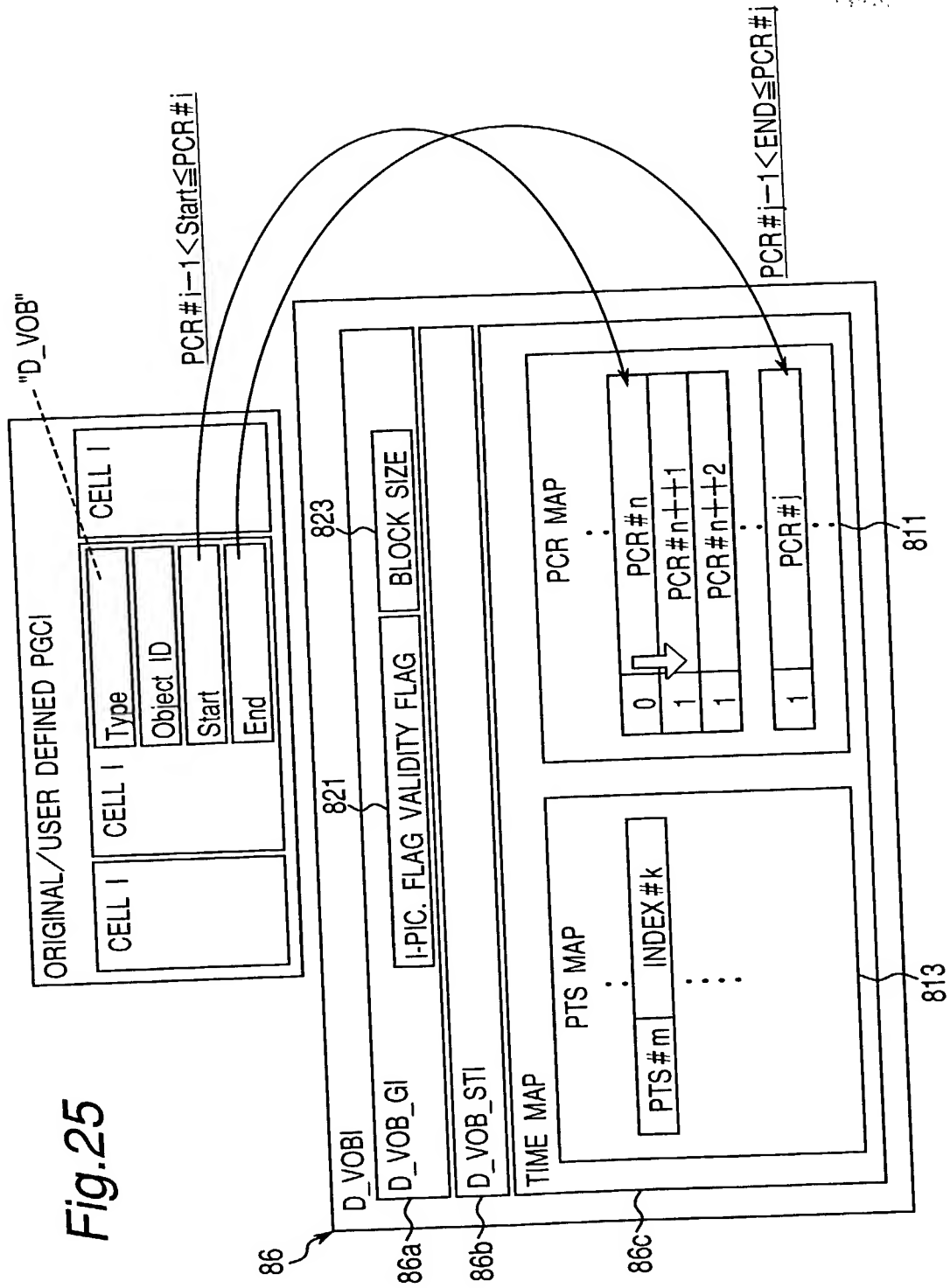


Fig.24

Fig.25



1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Fig.26

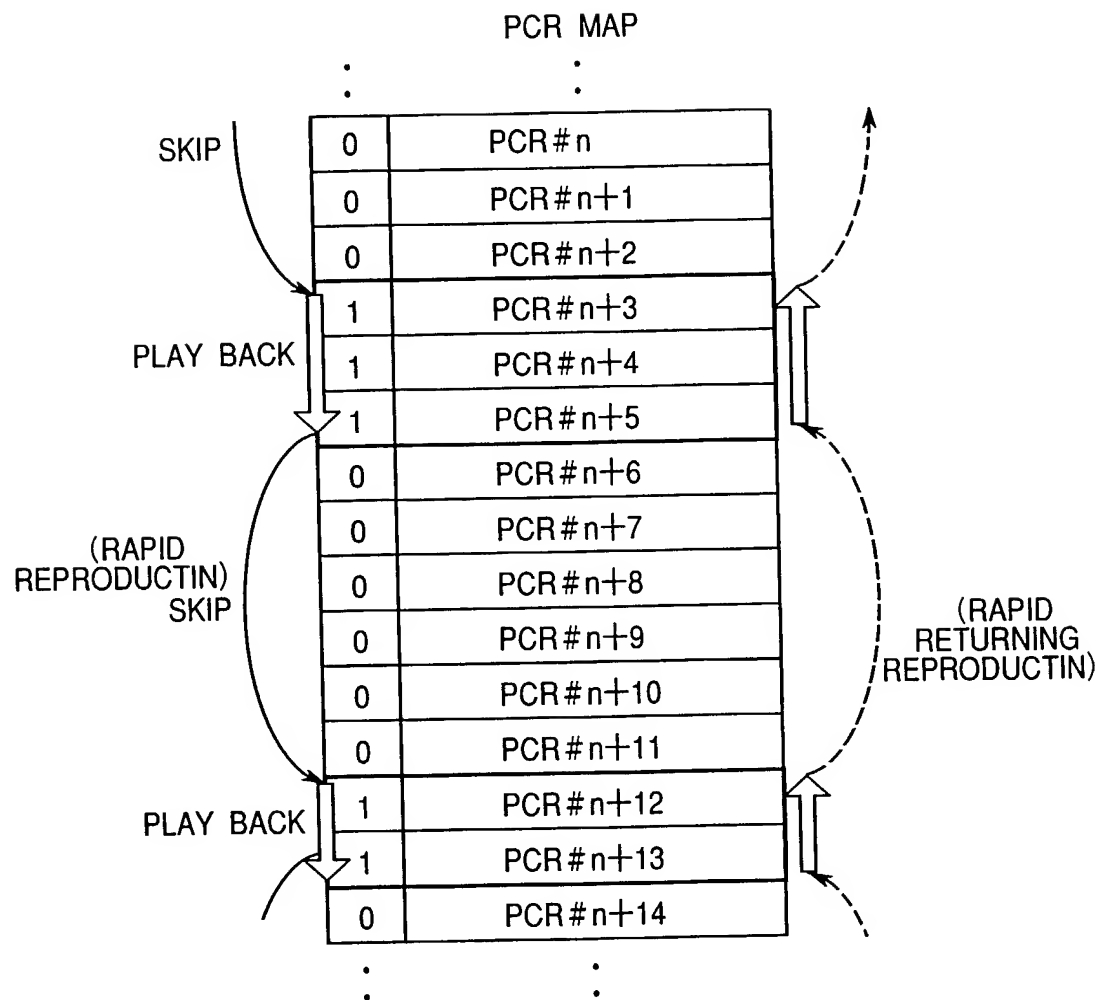


Fig. 27

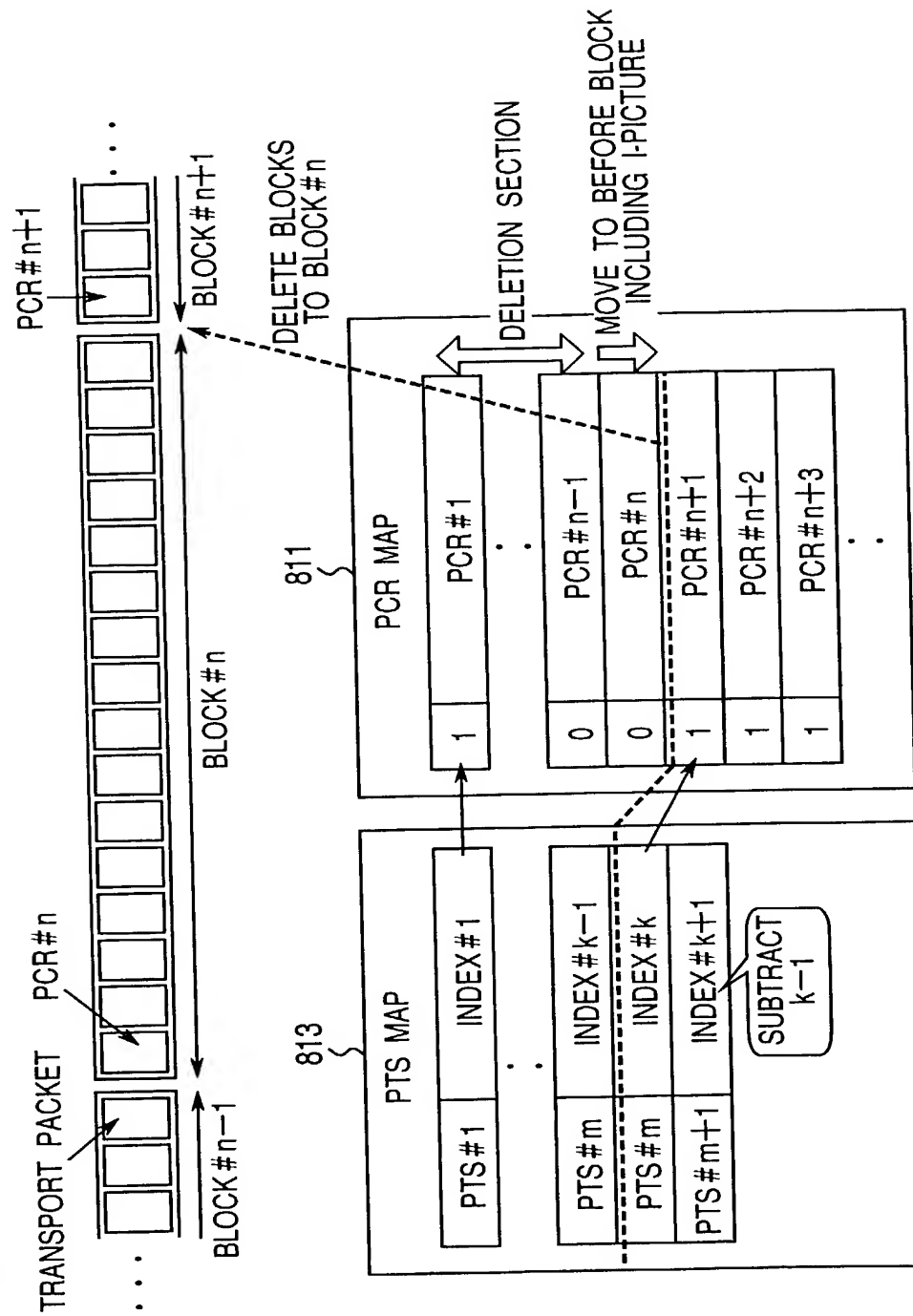


Fig.28

GENERAL INFORMATION OF DIGITAL BROADCASTING OBJECT

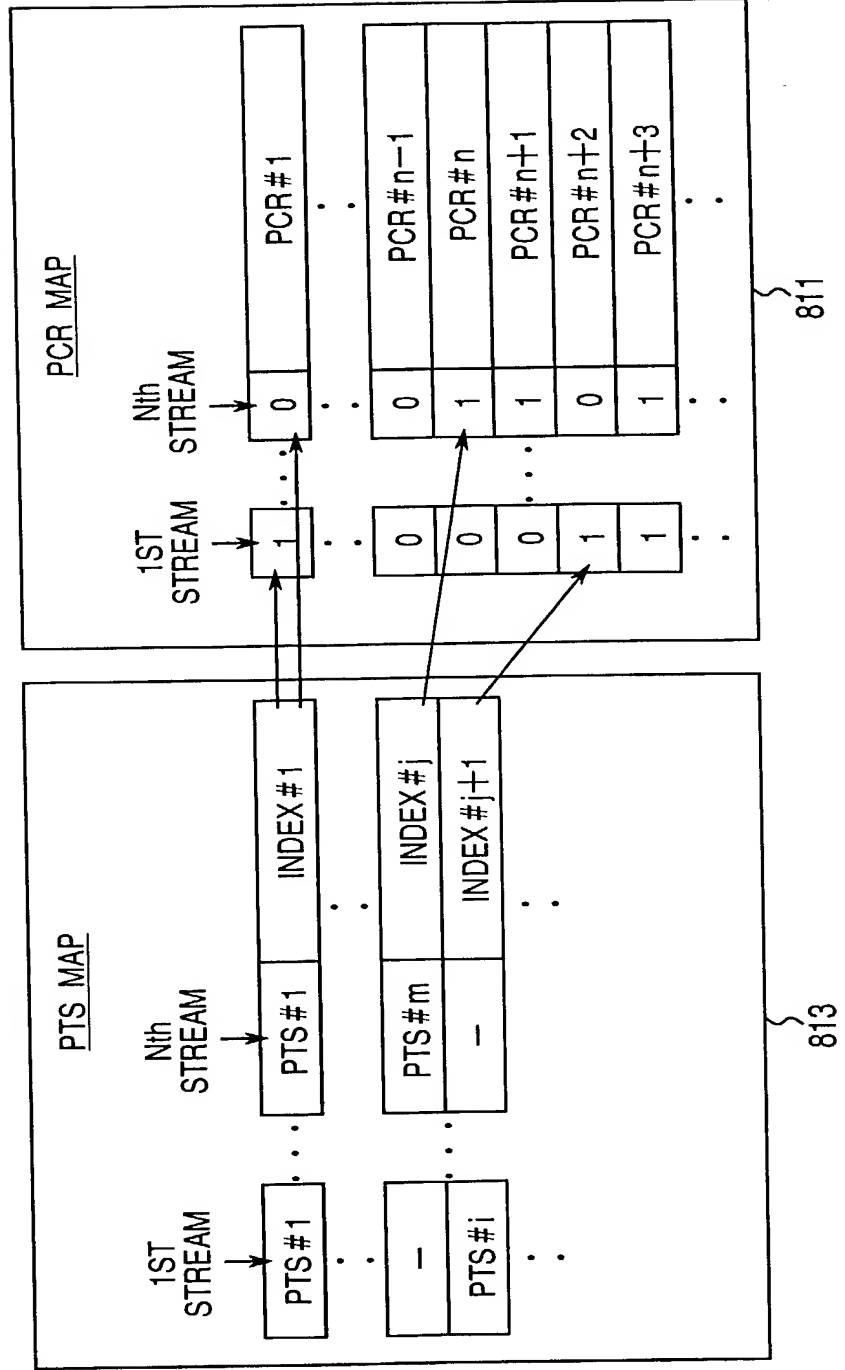
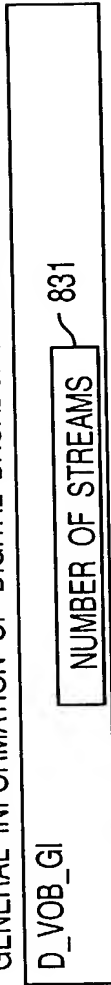


Fig.29

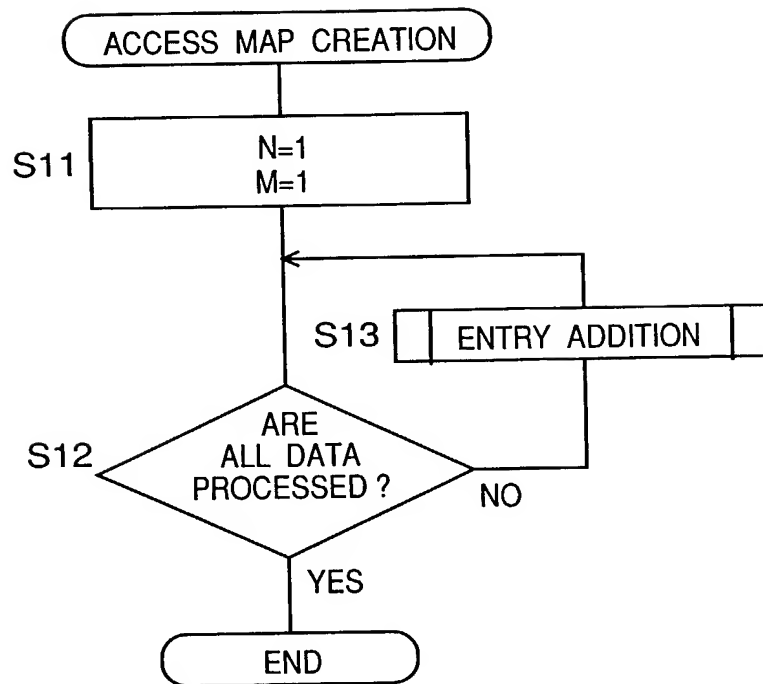
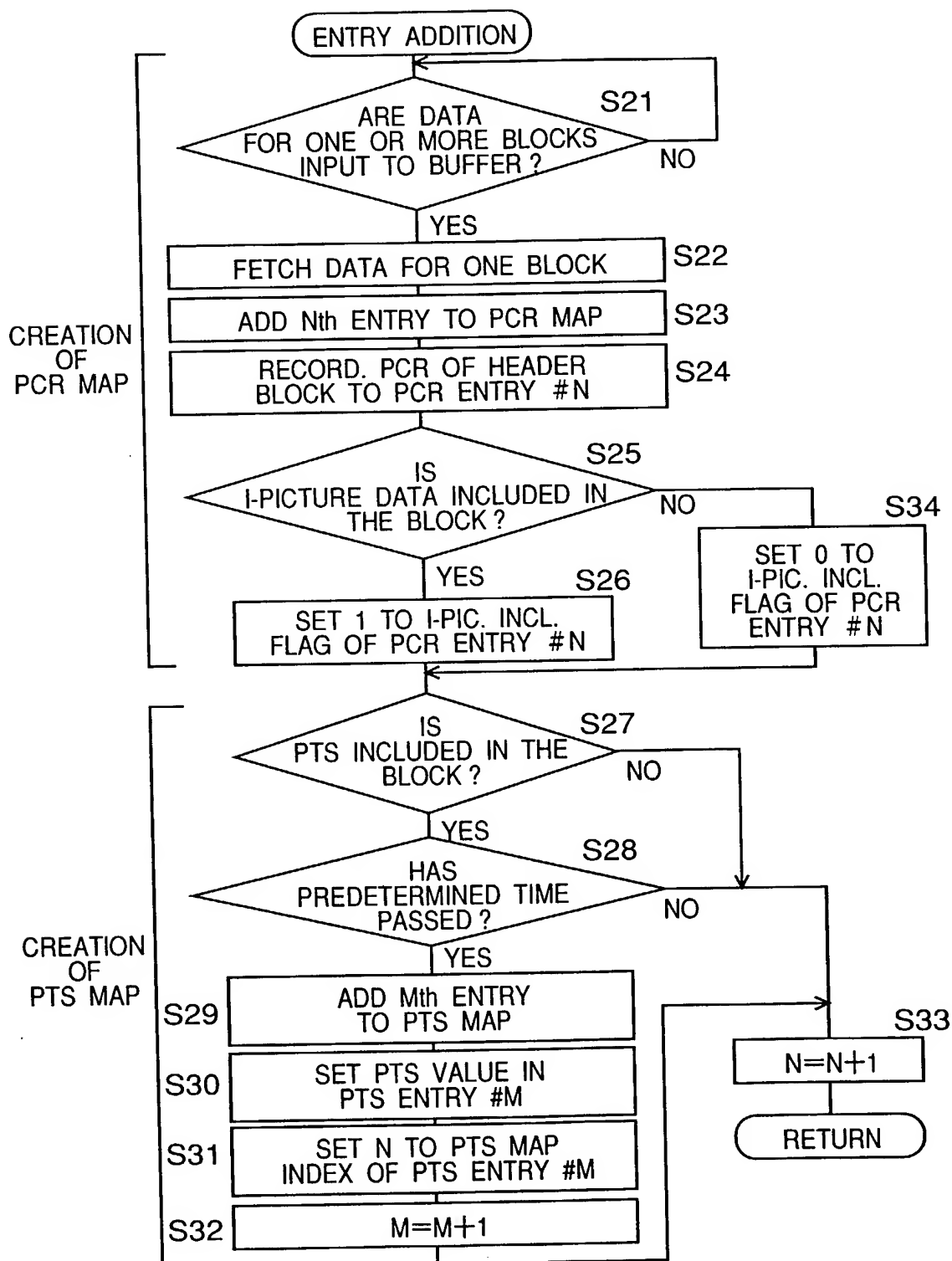
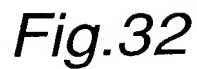


Fig.30







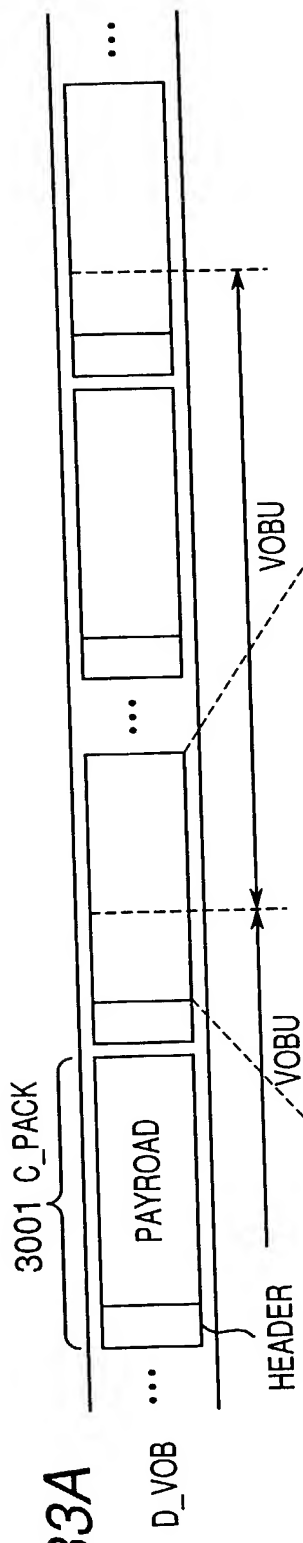


Fig.33A

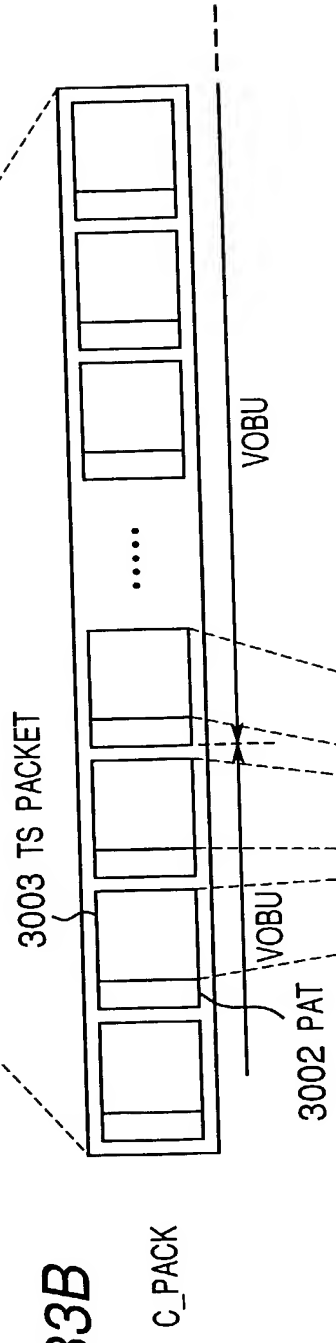


Fig.33B

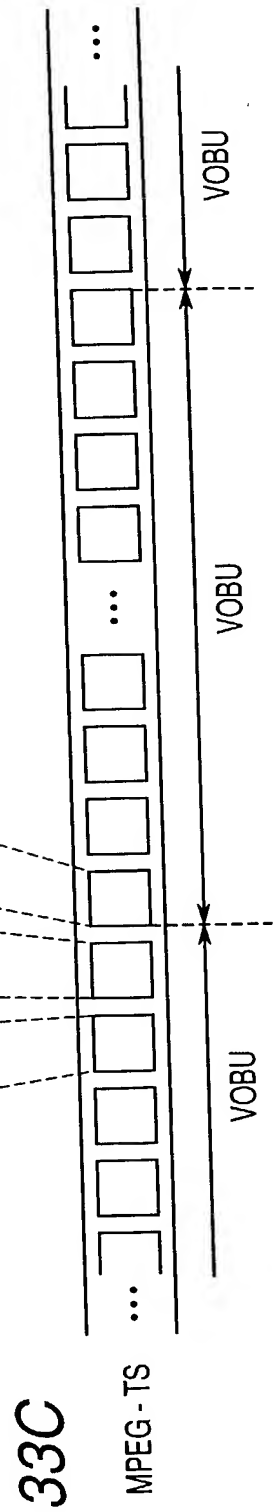
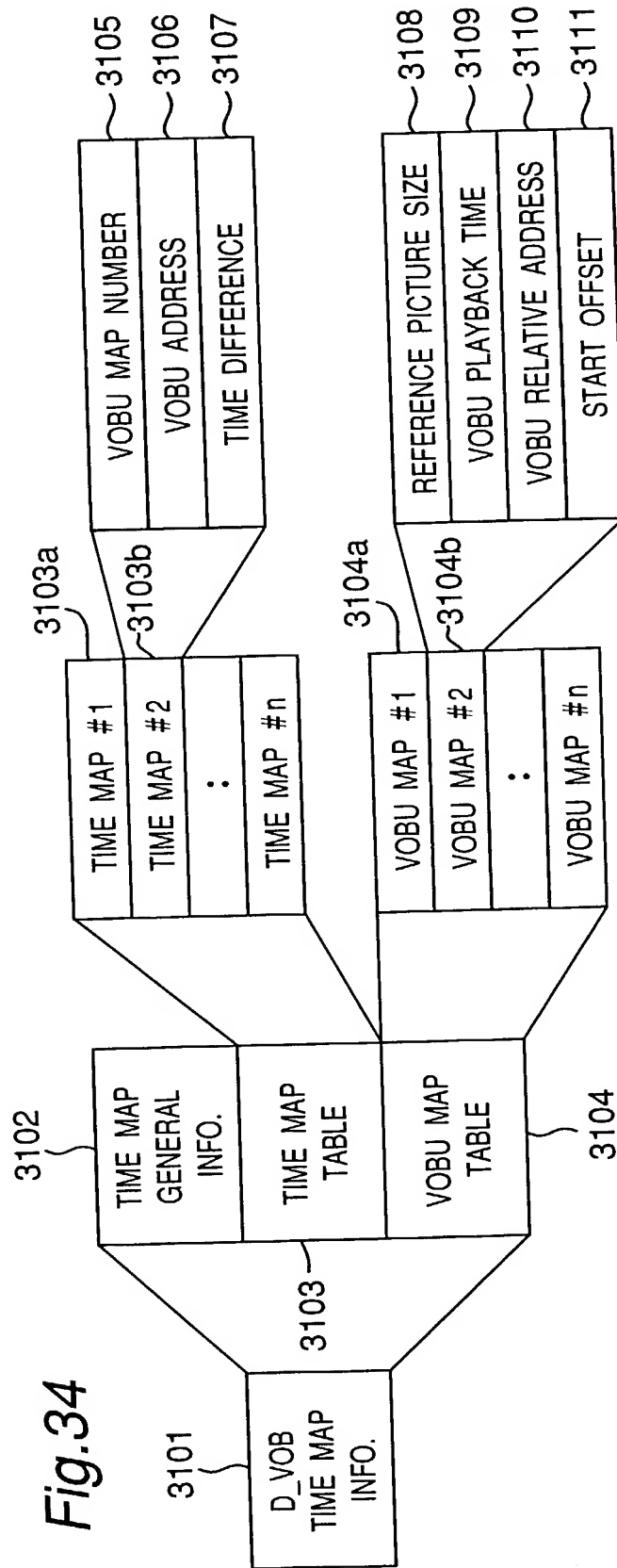


Fig.33C

Fig.34



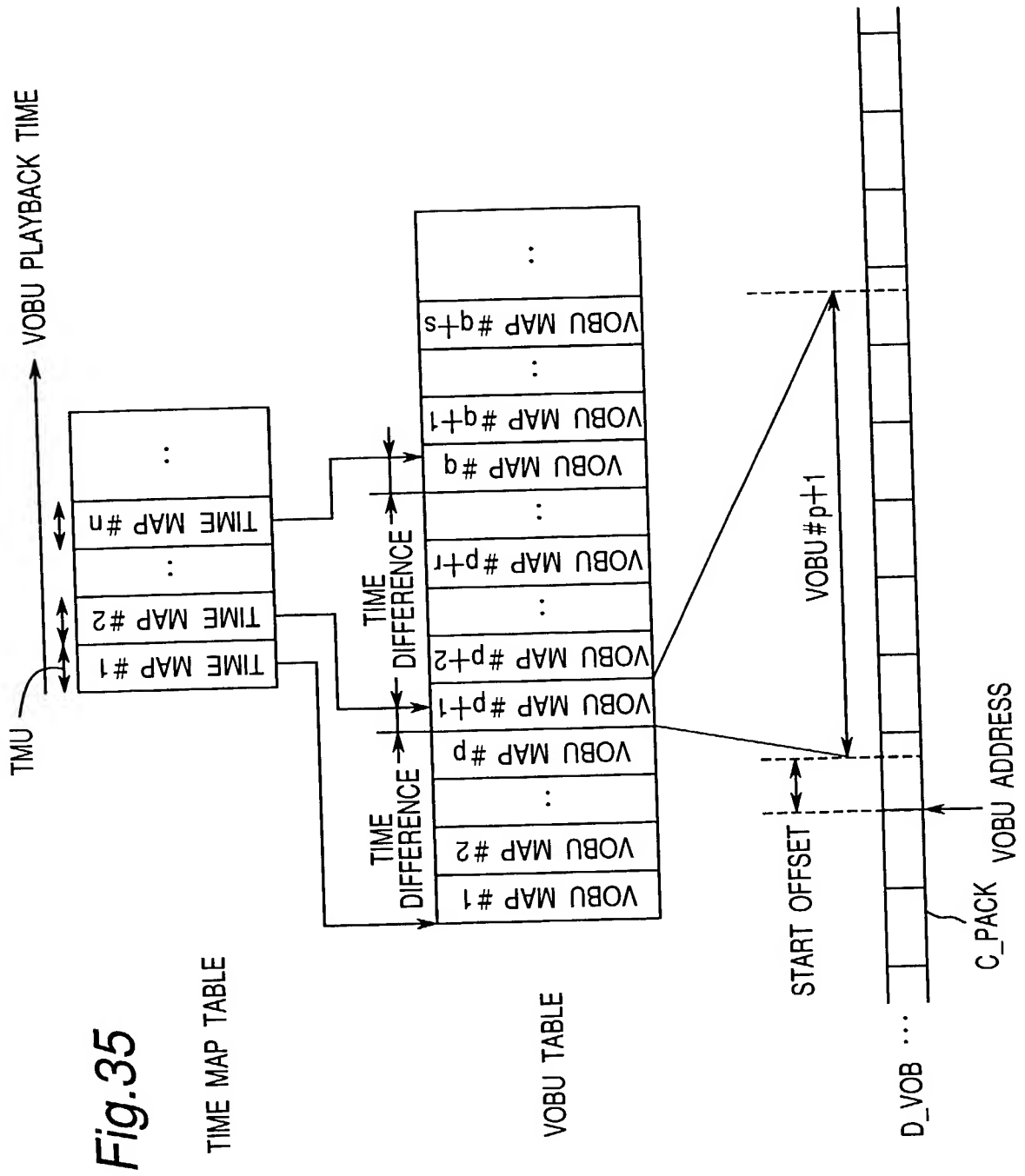
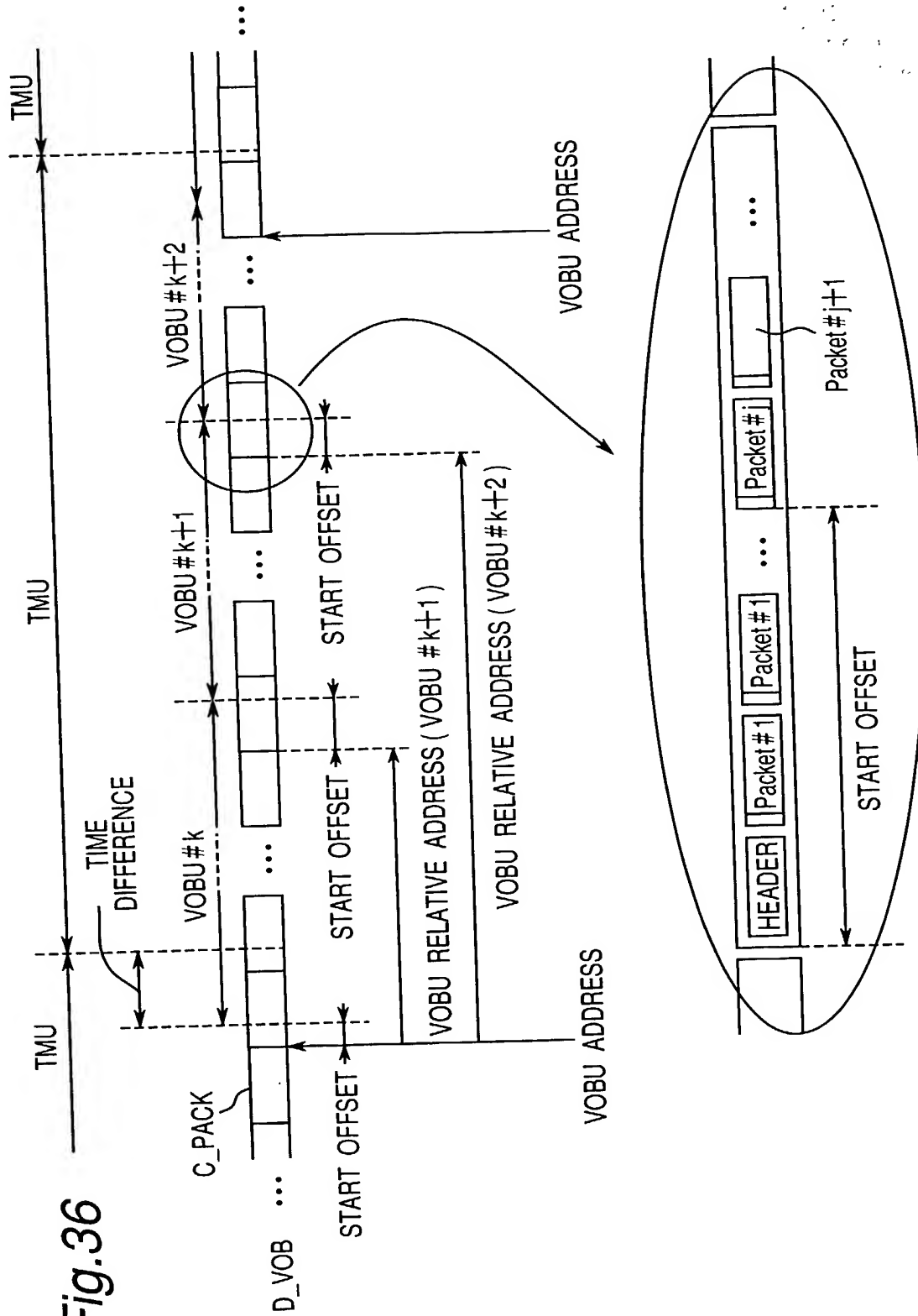


Fig. 36



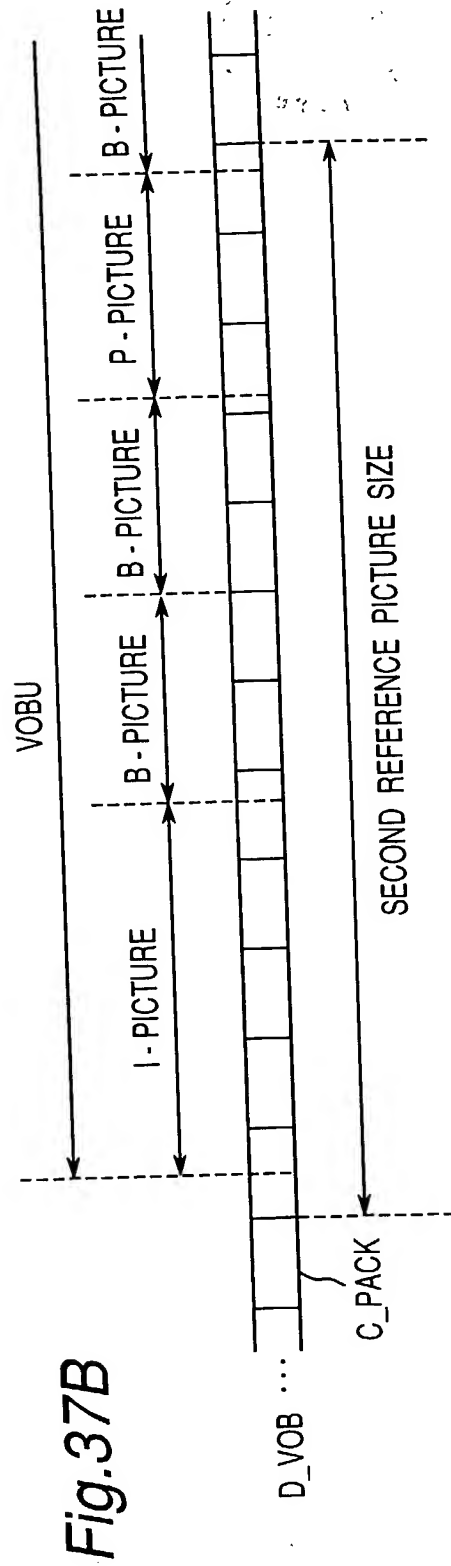
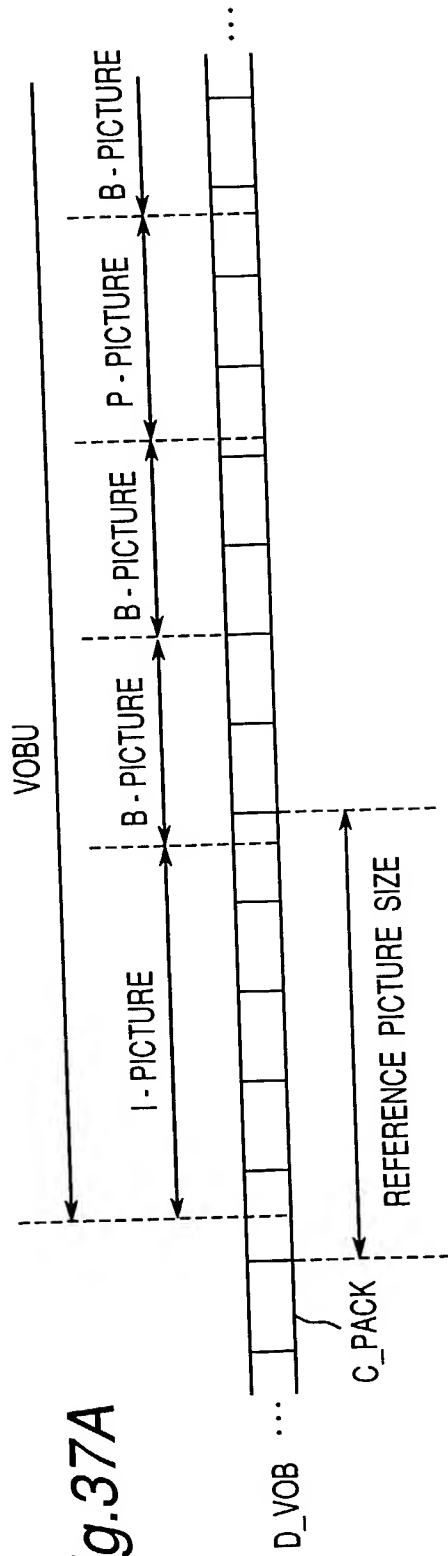


Fig.38

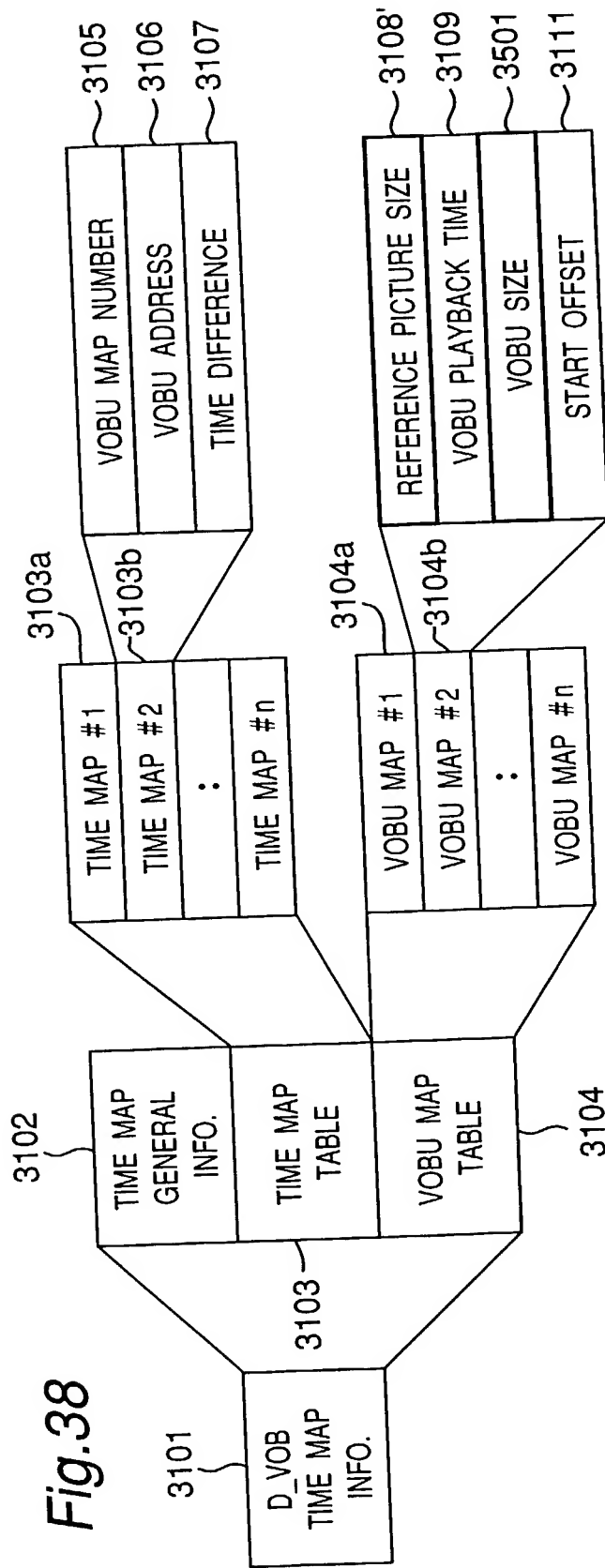
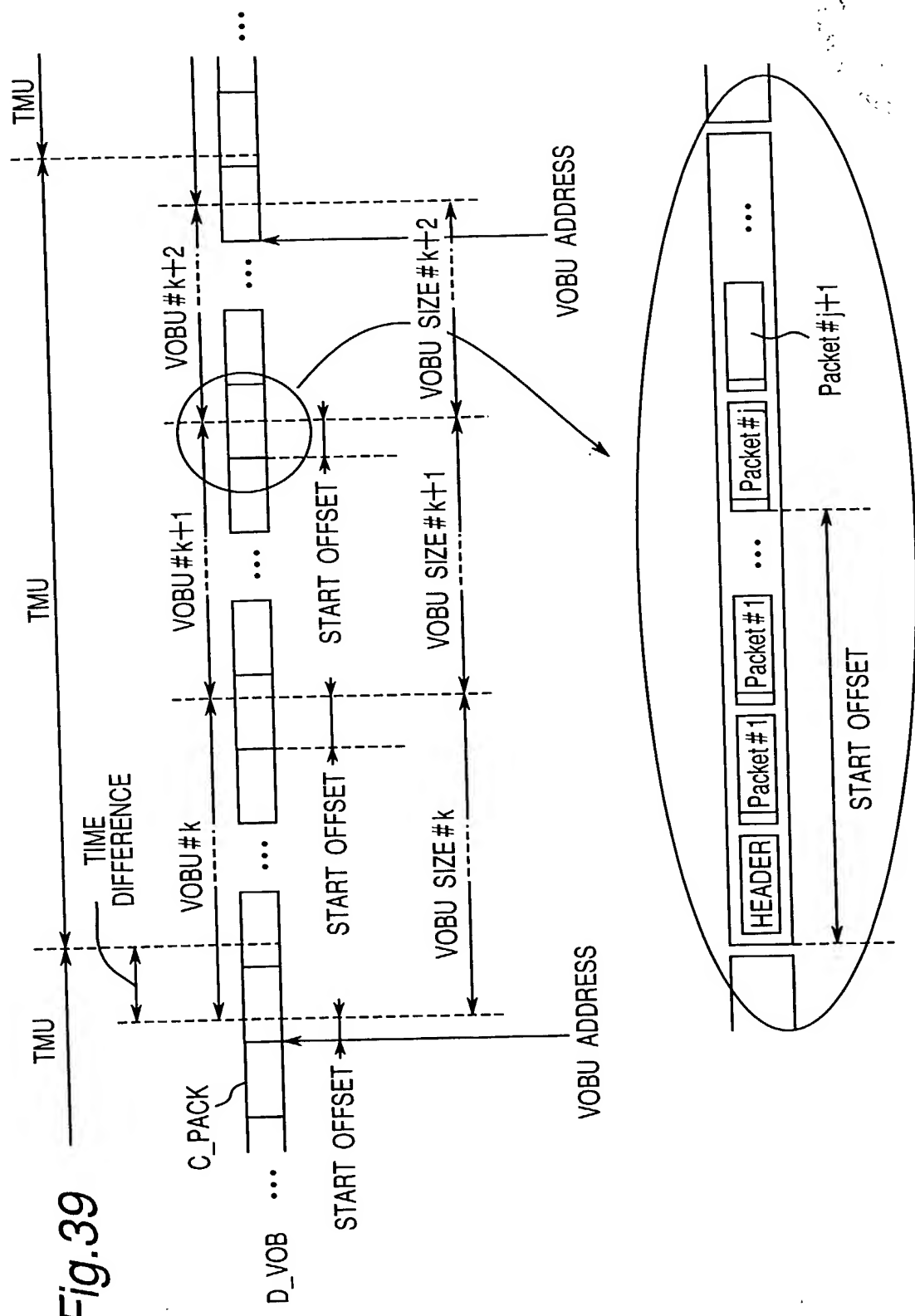
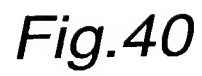


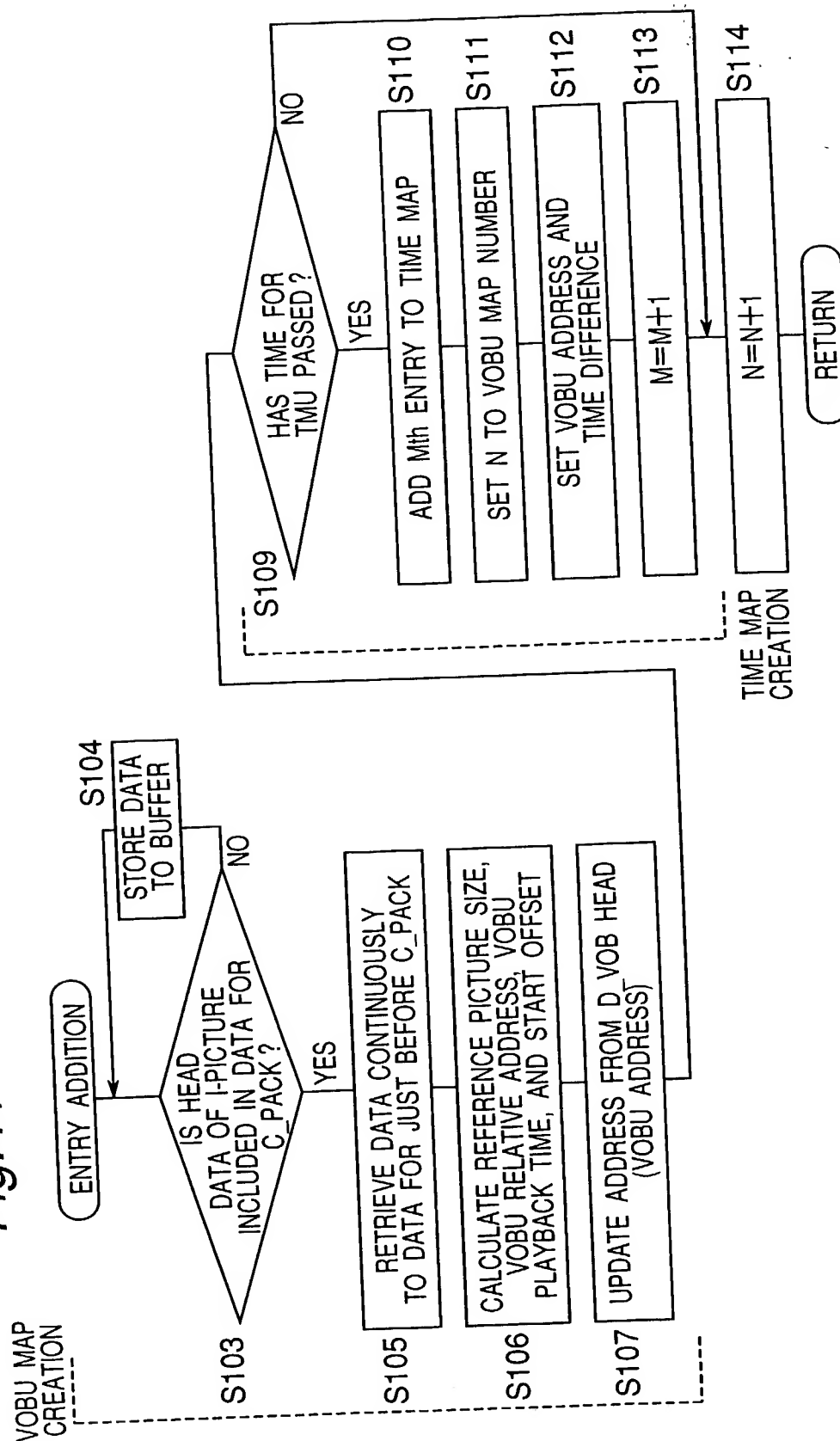
Fig.39

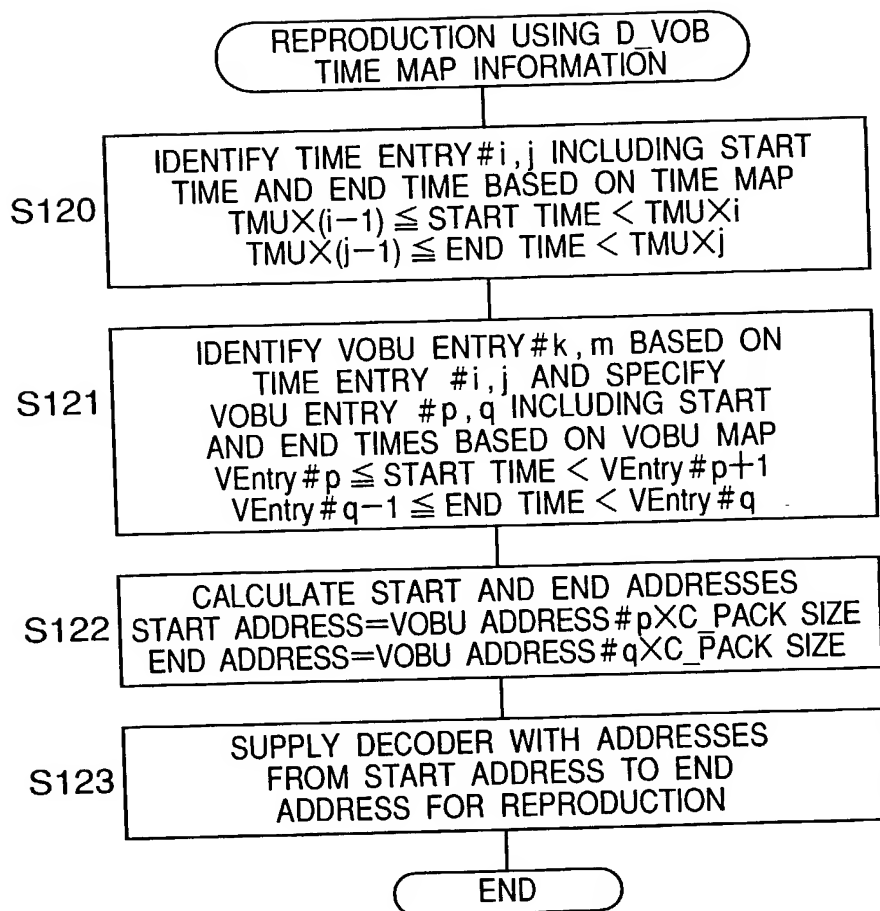


1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



ALL INFORMATION CONTAINED HEREIN IS UNCLASSIFIED





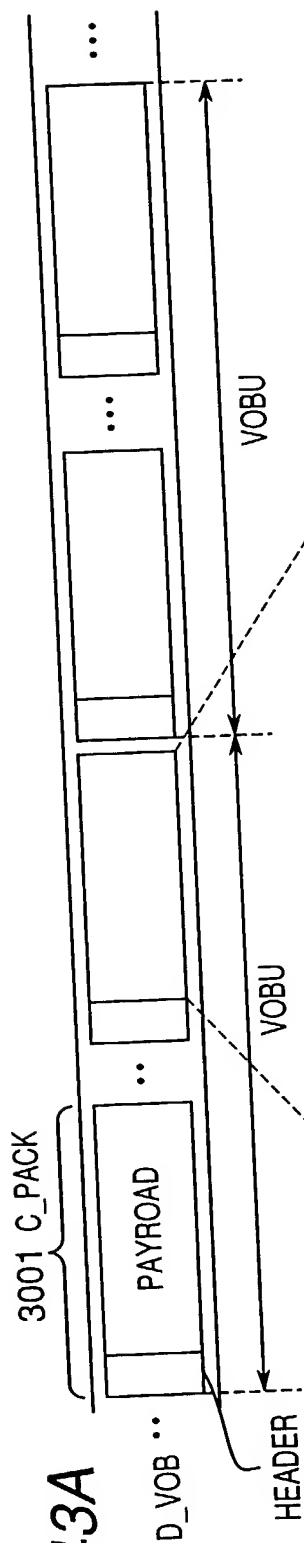


Fig. 43A

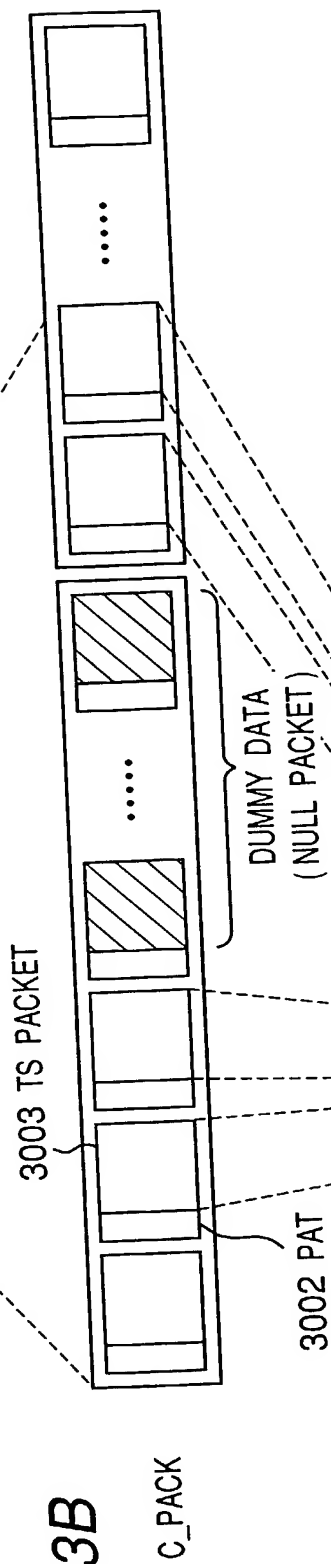


Fig. 43B

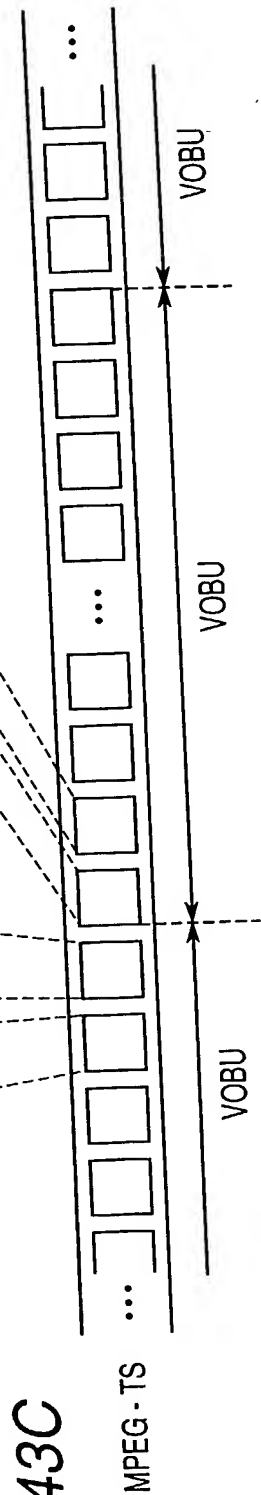


Fig. 43C

Fig. 44A

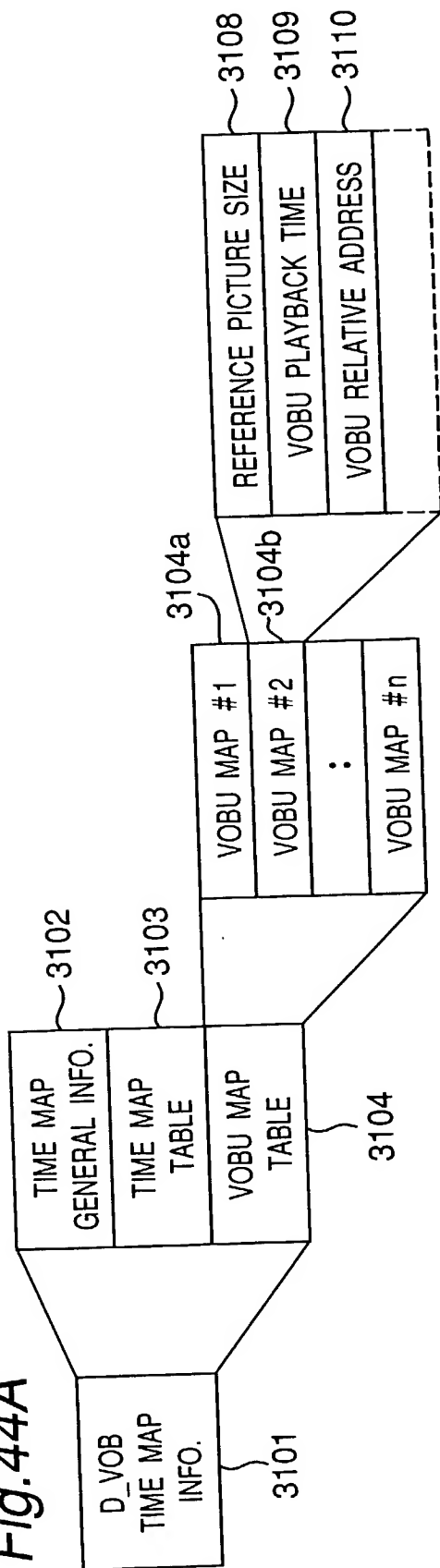


Fig. 44B

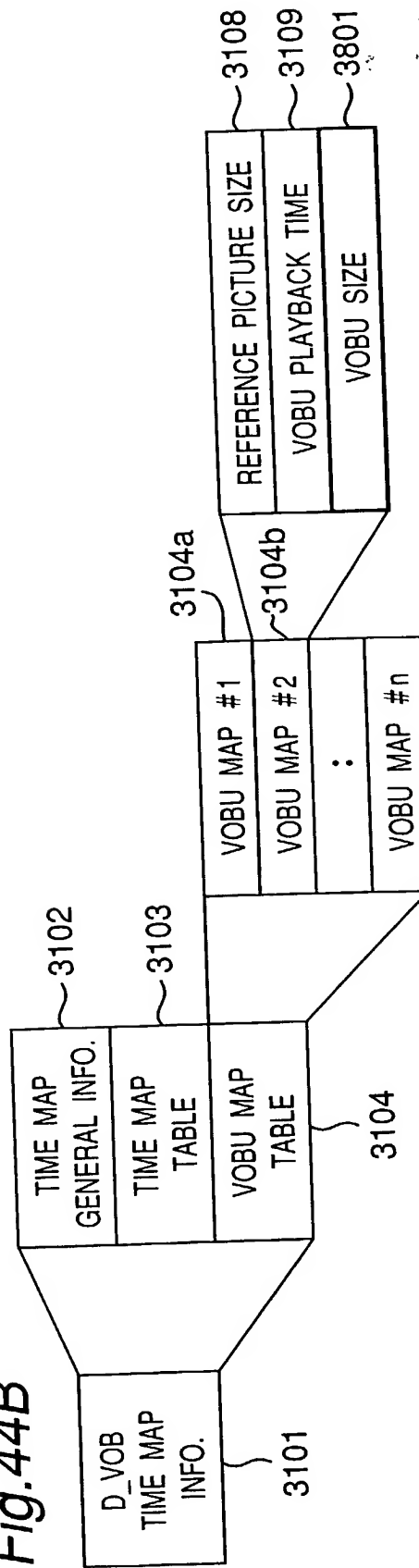


Fig. 45A

Fig. 45B

Fig. 45C

